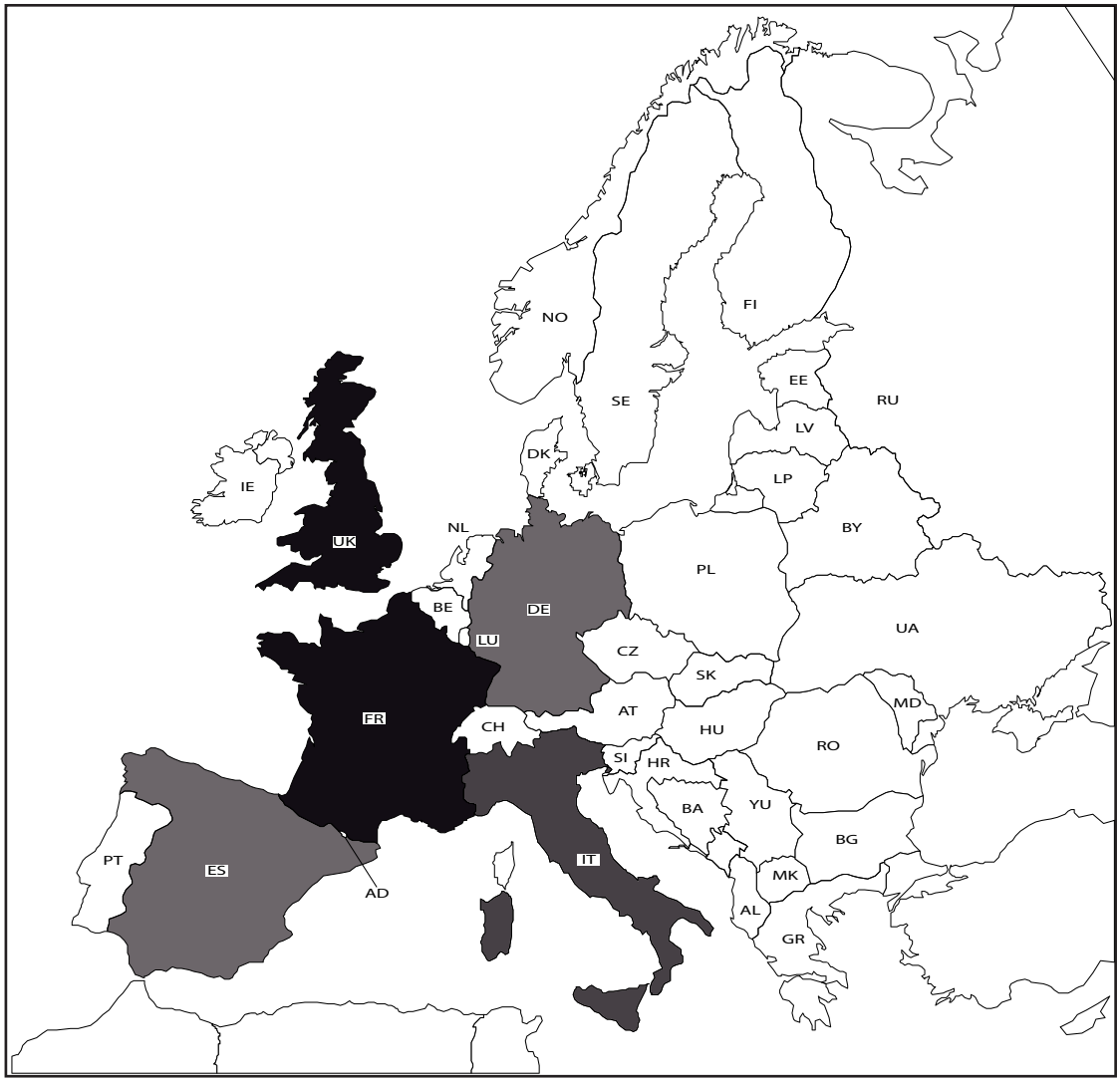
Extraflame®

Riscaldamento a Pellet

THERMO PRODUCTS USER MANUAL

UK



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1. WARNINGS

Installation must be carried out by qualified staff and/or manufacturer technical assistance, who must provide the buyer with a declaration of conformity for the system and will assume full responsibility for final installation and as a consequence the correct functioning of the installed product. It is necessary to bear in mind all laws and national, regional, provincial and town council Standards present in the country the appliance has been installed. The manufacturer cannot be held responsible for the failure to comply with such precautions.

1.Electric connections: it is therefore recommended that after any intervention on the product, that authorised staff pay particular attention to the electric connections, especially the stripped parts of the wires. These must not escape from the terminal board in any situation, thus preventing possible contact with the live parts of the wire.
2. Type of use: this stove must be destined for the use for which it has been expressly realised.
3.Liability of the manufacturer: The manufacturer is exempt from any liability, contractual and extracontractual, for injury/ damage caused to persons/animals and objects, due to installation, adjustment and maintenance errors and improper use.
4.Check integrity of the product: After the packaging has been removed, check the integrity and completeness of the contents. If this does not comply, contact the dealer where the appliance was purchased.
5.Electric connections: All electric components that make up the stove must be replaced with original spare parts exclusively by an authorised after-sales centre, thus guaranteeing correct functioning.
6.Maintenance: The stove must be serviced at least once a year, programming it in advance with qualified staff and/or the manufacturer's technical after-sales assistance. **Nota bene: In case of thermo product or boiler, the product or system venting is not covered by the warranty.**

2. SAFETY

For safety reasons, remember that:

- ❖ The stove must not be used by persons (including children) with reduced physical, sensorial and mental capacities or who are unskilled persons, unless they are supervised and trained regarding use of the appliance by a person responsible for their safety.
- ❖ Children must be controlled to ensure that they do not play with the appliance.
- ❖ Do not touch the stove when you are barefoot or when parts of the body are wet or humid.
- ❖ The safety and adjustment devices must not be modified without the authorisation or indications of the manufacturer.
- ❖ Do not pull, disconnect, twist electric cables leaving the stove, even if disconnected from the electric power supply mains.
- ❖ It is advised to position the power supply cable in a way that it does not come into contact with hot parts of the appliance.
- ❖ The power supply plug must be accessible after installation.
- ❖ Do not close or reduce the dimensions of the airing vents in the place of installation. The airing vents are indispensable for correct combustion.
- ❖ Do not leave the packaging elements within reach of children or unassisted disabled persons.
- ❖ The hearth door must always be closed during normal functioning of the product.
- ❖ When the appliance is functioning and hot to the touch, especially all external surfaces, attention must be paid
- ❖ Check for the presence of any obstructions before switching the appliance on following a prolonged standstill period.
- ❖ The stove has been designed to function in any climatic condition (also critical). In particularly adverse conditions (strong wind, freezing) safety systems may intervene that switch the stove off. If this occurs, contact the technical after-sales service and always disable the safety system.
- ❖ If the flue should catch fire, be equipped with suitable systems for suffocating the flames or request help from the fire service.
- ❖ This appliance must not be used to burn waste
- ❖ Do not use any inflammable liquids for ignition
- ❖ During the filling phase do not allow the bag of pellets to come into contact with the product
- ❖ **The majolicas are top quality artisan products and as such can have micro-dots, crackles and chromatic imperfections. These features highlight their valuable nature. Due to their different dilation coefficient, enamel and majolica produce crackling,. which demonstrate their effective authenticity. To clean the majolicas, it is recommended to use a soft, dry cloth. If a detergent or liquid is used, the latter could penetrate inside the crackles, highlighting the same.**

3. SAFETY DEVICES

SAFETY DEVICES Key: * = present, - = not present	COMFORT IDRO	DUCHESSA IDRO	ECOLOGICA IDRO	MELINDA	ISIDE	
Circuit board: intervenes directly by sending the product into alarm conditions until complete cooling, in the event of: breakage of flue gas motor, pellet feed motor breakage, black out (if more than 10 seconds), no ignition	*	*	*	*	*	
Upper door micro switch (combustion chamber): if the combustion chamber is opened, the pellet feed motor functioning is blocked	-	*	*	-	-	
Insert blocking micro switch: if the end run micro switch warns that the insert is not blocked, electric energy does not pass to power it	*	-	-	-	-	
Electronic pressure switch: in the event of inadequate depression, it takes the machine to alarm conditions	*	*	*	*	*	
Mechanical pressure switch: in the event of inadequate depression, it takes the machine to alarm conditions	-	-	-	*	*	
F2.5 A 250V fuse (stoves): protect the machine from violent current drops	*	*	*	*	*	
85°C calibrated mechanical bulb with manual rearm: intervenes by blocking fuel feed whenever the pellet tank t° reaches the limit of 85°C. **Rearm must be performed by qualified staff and/or the manufacturer's technical after-sales assistance.**	*	*	*	*	*	
100°C calibrated mechanical bulb with manual rearm: intervenes by blocking the fuel feed whenever the t° of the water inside the product is near to 100°. **Rearm must be performed by qualified staff and/or the manufacturer's technical after-sales assistance.**	*	*	*	*	*	
Minimum and maximum pressure switch: if the system pressure is below 0.6 bar or over 2.5 bar, or if there is air in the system, it does not allow the product to function. **Rearm must be performed by qualified staff and/or the manufacturer's technical after-sales assistance.**	*	*	*	*	*	

TABLE OF SAFETY DEVICES FOR CLOSED VESSEL SYSTEM AND NOT PRESENT IN THE PRODUCT					
Safety valve	*	*	*	*	*
Pump control thermostat (it is managed by the water probe and the board program)	*	*	*	*	*
Acoustic alarm activation thermostat	-	-	-	-	-
Water temperature indicator (display)	*	*	*	*	*
Pressure indicator	-	-	-	-	-
Acoustic alarm	-	-	-	-	-
Regulation automatic circuit breaker switch (managed by board program)	*	*	*	*	*
Minimum and maximum pressure switch	*	*	*	*	*
Water overheating automatic circuit breaker switch (block thermostat)	*	*	*	*	*
Circulation system (pump)	-	*	*	*	*
Expansion system	-	*	*	*	*

During installation of the stove it is MANDATORY to adjust the system with a manometer in order to display the water pressure.

3.1. INSTALLATION AND SAFETY DEVICES

The installation, relative system connections, commissioning and inspection of correct functioning must be carried out perfectly, in total compliance with Standards in force, both national, regional and municipal, as well as these instructions.
For Italy, installation must be carried out by professionally authorised staff (Ministerial Decree dated 22.01.08 n°37).
Extraflame S.p.A. declines all responsibility for damages to objects and/or persons caused by the system.

3.2. SAFETY DEVICES FOR CLOSED VESSEL SYSTEM

According to the UNI 10412-2 (2006) Standard in force in Italy, the closed systems must have: safety valve, pump control thermostat, acoustic alarm activation thermostat, temperature indicator, pressure indicator, acoustic alarm, regulation automatic circuit breaker switch, automatic circuit breaker block switch (block thermostat), circulation system, expansion system, safety dissipation system incorporated with the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system.

3.3. DISTANCES OF SAFETY DEVICES ACCORDING TO THE STANDARD

Component	Distance
Temperature safety sensors	On the machine or not exceeding 30 cm
Missing devices because not as per standard	Not exceeding one metre, on the flow pipe

The temperature safety sensors must be in place on the machine at a distance no greater than 30 cm from the flow connection.
Whenever the generators lack a device, those missing can be installed on the generator flow pipe, within a distance no greater than 1m from the machine.
The domestic heating appliances with automatic feeding must: be supplied with a fuel block thermostat or be supplied with a cooling circuit set-up by the appliance manufacturer.
The cooling circuit must be activated by a heat safety valve such to guarantee that the limit temperature set by the Standard is not exceeded.
Connection between the power supply unit and the valve must be free from interceptions.
The pressure upstream from the cooling circuit must be at least 1.5 bar.
ATTENTION! THE COMFORT IDRO MODEL DOES NOT HAVE EXPANSION VESSEL AND PUMP AS PER STANDARD

4. HYDRAULIC SYSTEM

Certain concepts referring to the Italian UNI 10412-2 (2009) Standard are described in this chapter. As previously described, when installing, all national, regional, provincial and town council Standards in force provided by the country in which the appliance has been installed must be complied with.

4.1. TYPE OF SYSTEM

There are two different types of system: open vessel system and closed vessel system. The product has been designed and realised to work with closed vessel systems.

4.2. CLOSED VESSEL SYSTEM FOR AUTOMATIC LOADING APPLIANCES

System in which the water it contains is not in direct or indirect communication with the atmosphere. Generally, the closed vessel system has one of the following expansion vessels:

- ❖ Pre-loaded closed expansion vessel with membrane impermeable to the passage of gases.
- ❖ Automatic closed expansion system with compressor and membrane impermeable to the passage of gases.
- ❖ Automatic closed expansion system with transfer pump and membrane impermeable to the passage of gases.
- ❖ Expansion system without diaphragm.

4.3. GENERALITY

The closed systems must have:

- ❖ Safety valve
- ❖ Pump control thermostat
- ❖ Acoustic alarm activation thermostat
- ❖ Temperature indicator
- ❖ Pressure indicator
- ❖ Acoustic alarm
- ❖ Adjustment automatic circuit breaker switch
- ❖ Automatic circuit breaker switch (block thermostat)
- ❖ Circulation system
- ❖ Expansion system
- ❖ Safety dissipation system incorporated with the generator with thermal safety valve (self-activated), whenever the appliance does not have a temperature self-adjustment system

The temperature safety sensors must be in place on the machine at a distance no greater than 30 cm from the flow connection. Whenever the generators lack a device, those missing can be installed on the generator flow pipe, within a distance no greater than 1m from the machine. Domestic type heating appliances with automatic feed must have a fuel block thermostat or a cooling circuit prepared by the manufacturer of the appliance, activated by a circuit breaker safety valve such as to guarantee that the limit temperature set by the Standard is not exceeded. Connection between the power supply unit and the valve must be free from interceptions. The pressure upstream from the cooling circuit must be at least 1.5 bar.

4.4. SAFETY VALVES

The load capacity of the safety valve must allow the discharge of a quantity of vapour, not lower than: Q / 0.58 [kg/h] where: Q is the useful outlet power to the generator water expressed in kilowatt. The diameter of the minimum net transversal section of the valve inlet must not be lower than 15 mm. The valve load pressure, equal to the calibration pressure, increased by the overpressure, cannot exceed the maximum exercise pressure of the heat generator. The designer must check that the maximum pressure existing in every point of the system, does not exceed the maximum exercise pressure of its every component. The safety valve must be connected to the highest part of the heat generator or outlet pipes, immediately near the generator. The length of the pipes route included between the attachment to the generator and the safety valve must not be higher than 1 m. The connection piping of the safety valve to the heat generator must not be traceable and must not present, in any point, section lower to the inlet of the safety valve or the sum of the inlet sections in case of more valves under the individual pipe. The discharge piping of the safety valve must be realised in order not to prevent the regular functioning of the valves and not to cause damages to persons; the discharge must flow immediately near the safety valve and be accessible and visible. The diameter of the discharge piping must not however be lower than that of the outlet connection of the safety valve. For diameter of outlet connection it is intended the minimum internal diameter on the valve outlet upstream of the eventual internal threading.

4.5. CLOSED EXPANSION VESSEL

Warnings: check that the expansion vessel is 1.5 bar.
The vessel maximum exercise pressure must not be lower than the calibration pressure of the safety valve, increased by overpressures, characteristic of the same valve, bearing in mind the eventual level difference between vessel and valve and the pressure generated by the functioning of the pump. The capacity of the expansion vessel/s is evaluated depending on the total system capacity as results from the project. The closed expansion vessels must comply with the dispositions regarding the planning, manufacturing, evaluation of conformity and use for pressure appliances. Intercepting objects or section decreases must be inserted/practiced on the connection piping, which can be constituted by system portions. The insertion of a three-way intercepting valve which allows connection between the vessel and the atmosphere for maintenance operations, is allowed. Such device must be protected against accidental manoeuvres. The connection pipe must be realised in order not to present scales or deposits storage points. In case of more heat generators which feed the same plant or the same secondary circuit, each heat generator must be connected directly to the expansion vessel or plant expansion vessels unit, altogether dimensioned for the total volume of water contained in the same plant or the same independent circuit. Where it is necessary to separate the individual heat generator from the expansion vessel or expansion vessels unit, a three-way tap must be applied on the connection piping between the generator and the vessel, in order to ensure, in every position, the connection of the generator with the expansion vessel or with the atmosphere. The expansion vessels, the connecting pipes, the bleed pipes and drain pipes must be protected from freezing, where this phenomenon occurs. The solution used for this purpose is described in the design.

4.6. COMMISSIONING CHECKS

Before connecting the boiler:
a) wash all system piping in order to remove any residues which might compromise the correct functioning of certain system components (pumps, valves, etc.).
b) check to verify that the flue has adequate draft, is not narrowed and that other appliances do not discharge into the flue.
This is to prevent unexpected power increases. Only after this control can the chimney fitting between the boiler and flue be mounted. It is recommended to control the fittings with pre-existing flues.

5. AUTOMATIC THERMOSTATIC MIXER VALVE (MANDATORY)

The automatic thermostatic mixing valve finds applications in solid fuel boilers as it prevents cold water return into the exchanger.
Routes 1 and 3 are always open and, together with the pump installed on the return, they guarantee water circulation inside the biomass boiler exchanger. An elevated return temperature, allows efficiency improvement, reduces formation of combustion product condensation and prolongs the boiler life period.
Valves on the market have different calibrations. Extraflame advises use of 55°C model with 1" hydraulic connections. Once the valve calibration temperature is reached, route 2 is opened and the boiler water goes to the system via the flow.

5.1. HYDRAULIC PLANT BASIC LAYOUT

NOTA BENE: the drawing in the figure is an example. It is recommended to consult the templates manual at ***http://www.extraflame.it/support*** for further information relative to the hydraulic connections, air intake/flue exhaust and dimension specifications of the product in question.

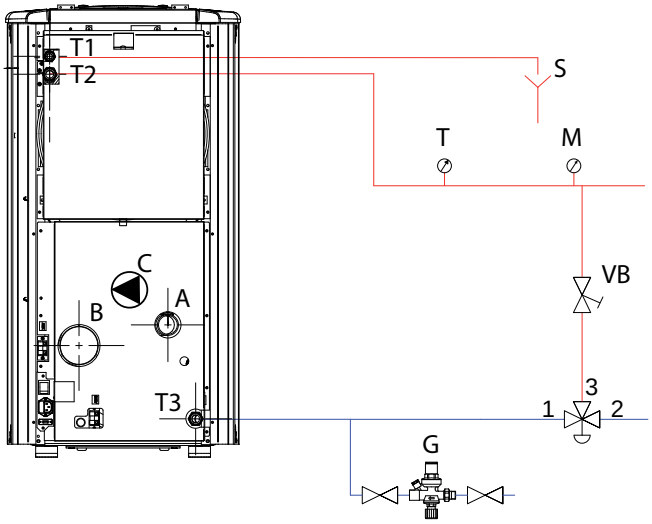


figure 1

A	primary air inlet
B	flue exhaust outlet
C	pump (in the models envisioned)
T1	3 bar safety drain
T2	boiler flow/output
T3	boiler return/inlet
M	manometer
T	thermometer
G	filling system
S	safety valve discharge
VB	balance valve

6. INSTANT DOMESTIC HOT WATER PRODUCTION ACCESSORY KIT

Warnings: if the instant hot water production accessory kit is to be used, contact the company technical after-sales service at **support@extraflame.it** .

7. STOVE POSITIONING

For correct product functioning, position the product in a way that it is perfectly level, with the aid of a spirit level.

8. INSTALLATION

The installation must be in compliance with:

- **UNI 10683 (2005) heat generators fed with wood and other solid fuels: installation.**

The chimneys must be in compliance with:

- *UNI 9731 (1990) chimneys: classification based on thermal resistance.*
- *EN 13384-1 (2006) Thermal and fluid dynamic calculation methods.*
- *UNI 7129 point 4.3.3 Fire Department dispositions, local rules and prescriptions.*
- *UNI 1443 (2005) chimneys: general requisites.*
- *UNI 1457 (2004) chimneys: clay/ceramic flue liners.*
- *UNI/TS 11278 Chimneys/Smoke channels/Pipes/Flues/metal pipes. Selection and correct use depending on the type of application and relative designation of the product.*

GLOSSARY

CLOSED HEARTH APPLIANCE
Heat generator which opening is only allowed through the loading of the fuel during use.

BIOMASS
Biological material, excluding the material incorporated in geological formations and transformed into fossils.

BIOFUEL
Fuel produced directly or indirectly by biomass.

CHIMNEY
Vertical pipe with the aim of collecting and expelling the fuel products coming from only one appliance, at a convenient height from the ground.

SMOKE CHANNEL OR FITTING
Pipe or connecting element between heat generator appliance and chimney to evacuate combustion products.

INSULATION
Group of set-ups and materials used to prevent the transmission of heat through a wall that separates rooms with different temperatures.

CHIMNEY CAP
Device positioned at chimney peak to ease the dispersion of combustion products into the atmosphere.

CONDENSATE
Liquid products that form when the combustion gas temperature is lower or equal to the water dew point.

HEAT GENERATORS
Appliance which allows to produce thermal energy (heat) through the rapid transformation, via combustion, of the chemical energy of the same fuel.

GATE VALVE
Mechanism for modifying the combustion gas dynamic resistance.

COMBUSTION PRODUCT EVACUATION SYSTEMS
Flue gas exhaust system independent from the appliance constituted by a fitting or smoke channel, chimney or individual flue and chimney cap.

FORCED DRAUGHT
Air circulation by means of the fan activated by electric motor.

NATURAL DRAUGHT
Draught which determinates in a chimney/flue for effect of the volume mass difference existing between smoke (hot) and surrounding atmosphere air, without any mechanical intake aid installed inside it or at its peak.

RADIATION AREA
Area immediately near the hearth in which the heat caused by combustion is diffused, where there must be no combustion materials .

REFLUX AREA
Area where leaking of the combustion products is verified, from the appliance towards the installation room.

The installation must be preceded by checking the chimneys, flues or unload terminals positioning of appliances similarly to:

- Installation prohibitions
- Legal distances
- Limitations disposed by local administrative regulations or particular authority prescriptions.
- Conventional limitations deriving from condominium regulations, constraints or contracts.

8.1. INSTALLATIONS ALLOWED

Only appliances working softly respect to the room or which do not place the room in depression respect to the external environment, can exist or be installed in the room where the heat generator will be installed.
Appliances for cooking food and relative hoods without extractor are only allowed in kitchens.

8.2. INSTALLATIONS NOT ALLOWED

In the room where the heat generator will be installed the following must not pre-exist or be
installed:

- hoods with extractor
- collective type ventilation pipes.

Should these appliances be in rooms adjacent, communicating with the installation room, the simultaneous use of the heat generator is forbidden, where a risk exists of one of the two rooms being placed in depression respect to the other.

8.3. CONNECTION TO THE SMOKE EVACUATION SYSTEM

UNI 10683 (2005) Standard

8.3.1. SMOKE CHANNEL OR FITTINGS

To mount the smoke channels, non-flammable elements will have to be used, ideal for resisting combustion products and their eventual condensing.

The use of flexible metal and asbestos cement pipes to connect the appliances to the flue is forbidden, even for pre-existing smoke channels.

There must be continuity between the smoke channel and the flue so that the flue does not lean on the generator. The smoke channels must not cross rooms where the installation of the combustion appliances is not allowed.

The mounting of the smoke channels must be carried out in order to guarantee smoke seal for the appliance functioning conditions, limit the forming of condensate and avoid it being transported towards the appliance.

The mounting of horizontal routes must be avoided.

For appliances where ceiling or wall non-coaxial discharges with respect to the appliance combustion product outlet have to be reached, the direction changes will have to realised using open elbows not greater than 45° (see figures below).

For the heat generator appliances equipped with electric fan for expelling combustion products, the instructions below must be followed:

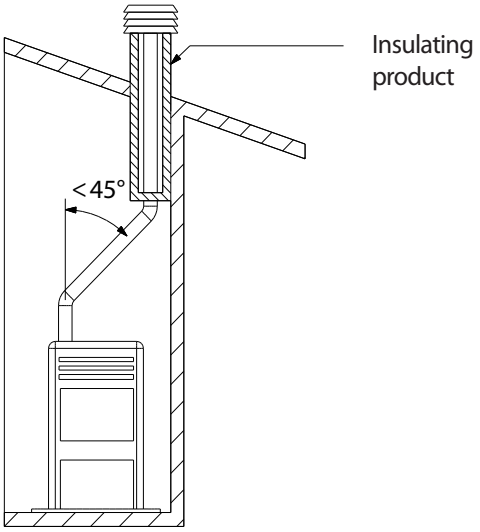


figure 2

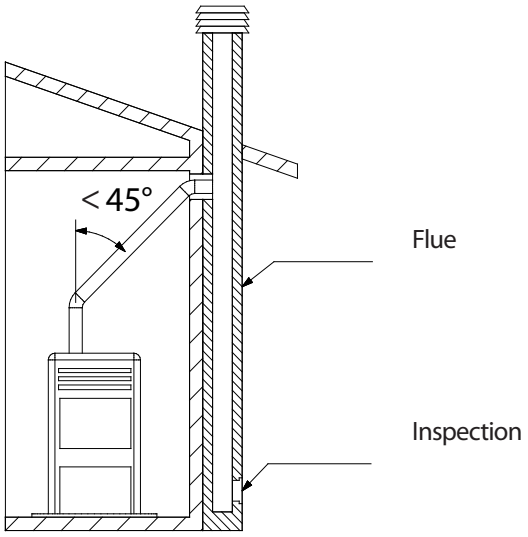


figure 3

- ❖ The horizontal routes will have to have a minimum upward slope of 3%
- ❖ The length of the horizontal route must be minimal and, however, not longer than 3 metres
- ❖ The number of direction changes including the one for effect of using the "T" element must not be more than 4 (if 4 bends are used, use double wall piping with an internal diameter of 120 mm).

In any case, the smoke channels must seal the combustion and condensate products and be insulated if they pass outside the installation room.

The use of counterslope elements is forbidden.

The smoke channel must allow the recovery of soot or be brushable.

The smoke channel must have constant section. Any section changes are only allowed at the flue coupling.

It is forbidden to have other air supply channels and pipes for plant engineering, especially if over-sized, transit inside the smoke channels. The mounting of manual draught adjustment devices on forced draught appliances is forbidden.

8.3.2. CHIMNEY OR INDIVIDUAL FLUE

The chimney or individual flue must respond to the following requisites:

- ❖ seal the combustion products, be waterproof and adequately insulated in line with the use conditions;
- ❖ be realised with materials which resist the normal mechanical stress, heat, action of the combustion products and any condensate;
- ❖ have mainly vertical progress with deviations from the axis not greater than 45°;
- ❖ be adequately distanced from fuel or flammable materials through air space or opportune insulation;

REFERENCES	Objects inflammable	Non-inflammable objects
A	200 mm	100 mm
B	1500 mm	750 mm
C	200 mm	100 mm

- ❖ have preferably circular internal section: the square or rectangular sections must have round corners with a radius not

lower than 20 mm;

- ❖ have constant internal section, free and independent;
- ❖ have rectangular section with max. ratio between the sides of 1.5.

It is recommended that the smoke pipe be equipped with a collection chamber for solid materials and any condensate situated under the smoke channel inlet, so that it can be easily opened and inspected from airtight door.

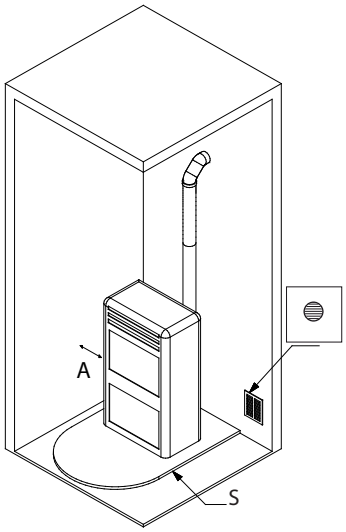


figure 4 S= floor-protection

Minimum 80 cm^2

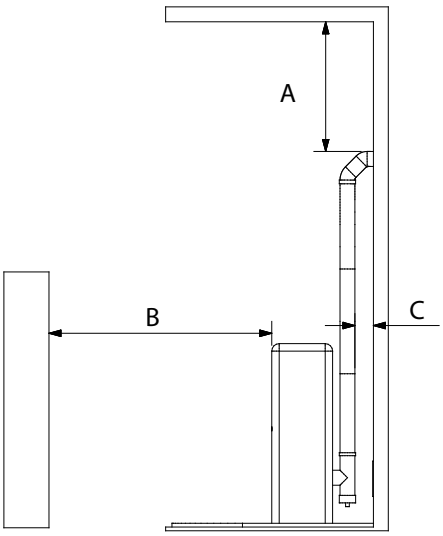
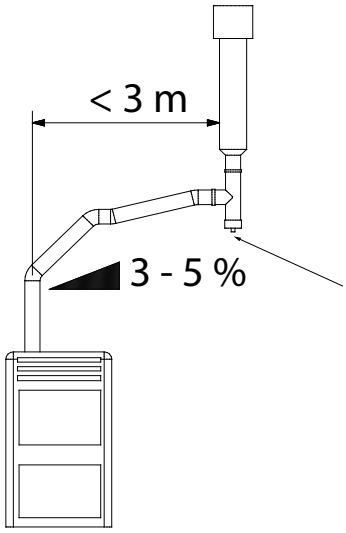


figure 5



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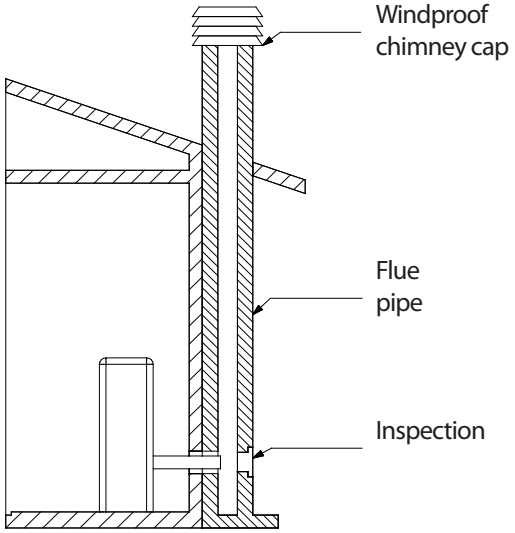

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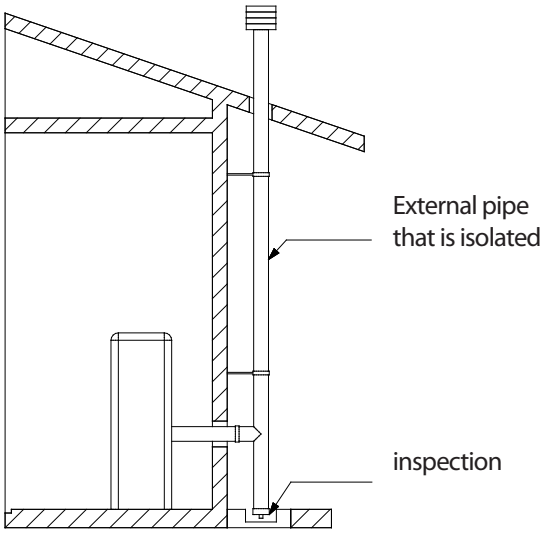


figure 8

ENGLISH

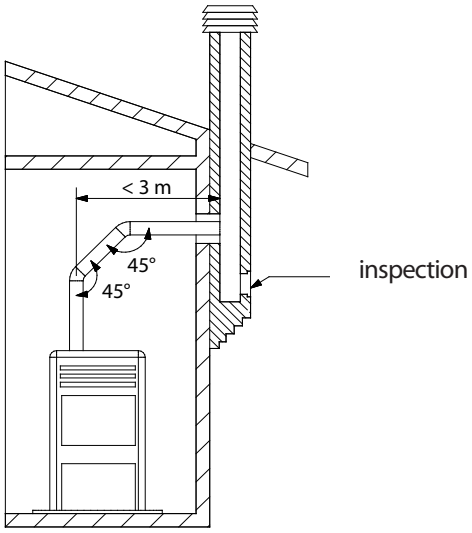


figure 9

Appliance connection to the flue and fuel products evacuation
The flue must receive the discharge from only one heat generator.
The direct discharge towards closed spaces is forbidden, even with clear sky.
The direct discharge of the fuel products must be at roof and the smoke pipe must have the features provided in the "Chimney or individual flue" section.

8.3.3. CHIMNEY CAP

The chimney cap must comply with the following requisites:

- ❖ have an internal section equivalent to that of the chimney;
- ❖ have useful outlet section not lower than double the chimney internal section;
- ❖ be built in order to avoid rain, snow, foreign bodies penetrating the chimney and so that, in the event of winds in any direction and inclination, the discharge of the fuel products is assured.
- ❖ be positioned in a way to guarantee an adequate dispersion and dilution of the combustion products and, however, outside the reflux area in which the formation of counterpressures occurs. Such area has different dimensions and configuration depending on the covering inclination angle. It is therefore necessary to adopt the minimum heights indicated in the figure layouts below.
- ❖ The chimney cap must not have mechanical intake means.

FLAT ROOF

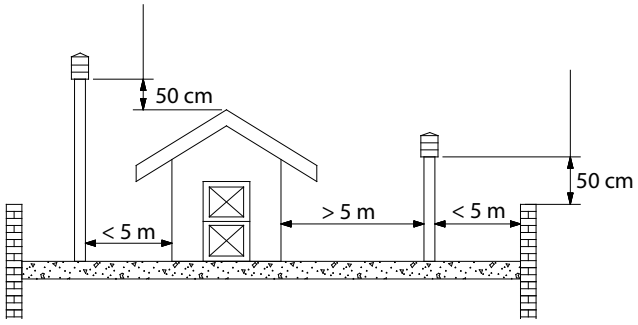
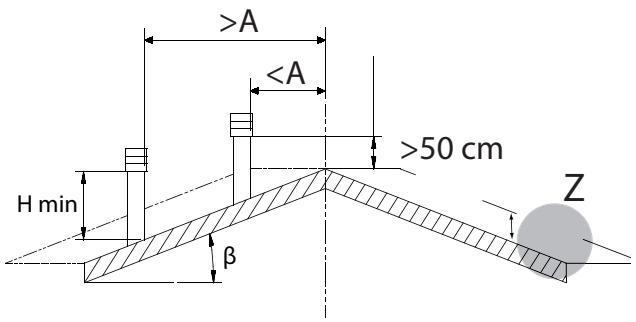


figure 10

SLOPING ROOF



Z=REFLUX AREA

figure 11

CHIMNEY CAPS, DISTANCES AND POSITIONING		
Roof inclination	**Distance between the ridge and the chimney**	**Minimum chimney height (measured from outlet)**
β	**A (m)**	**H (m)**
15°	< 1.85	0.50 m over the ridge
	> 1.85	1.00 m from roof
30°	< 1.50	0.50 m over the ridge
	> 1.50	1.30 m from roof
45°	< 1.30	0.50 m over the ridge
	> 1.30	2.00 m from roof
60°	< 1.20	0.50 m over the ridge
	> 1.20	2.60 m from roof

8.4. CONNECTION TO EXTERNAL AIR INLETS

The appliance must be able to use the necessary air to guarantee regular functioning through external air inlet. The air inlets must comply with the following requisites:

- ❖ have a total free section of at least 80 cm^2.
- ❖ must be protected by grates, metal net or suitable protections as long as they do not reduce the minimum section stated in the previous point and positioned in order to avoid them being obstructed.

If the combustion agent air is withdrawn directly from outside through a pipe, a downward bend must be mounted outside or a protection against the wind and no grates or similar must be positioned, (it is recommended that the air vent always communicates directly with the installation room even if the air is withdrawn from outside through a pipe). The air flow can also be obtained from an adjacent room, as long as the flow takes place freely through permanent openings communicating with the outside.
The adjacent room, with respect to the installation room, must not be put in depression with respect to the external environment by means of reverse draught caused by the presence of another used appliance or intake device in such room. The permanent openings in the adjacent room must comply with the above-described requisites. The adjacent room cannot be set up as garage, storage for combustion material or activity with danger of fire.

8.5. INSULATION, FINISHINGS, COVERING AND SAFETY RECOMMENDATIONS

The coverings, independently from the materials from which they are made, must constitute a self-supporting construction with respect to the heating block and not be in contact with it.
The cross members and finishings in wood or combustion materials must be positioned outside the hearth radiation area or adequately insulated.
If coverings in combustion material or sensitive to heat exist in the space above the generator, an insulating and non combustible protection diaphragm must be inserted.
Elements in combustible or inflammable material like wooden furniture, curtains, etc. directly exposed to the hearth radiation, must be positioned at a safe distance. The appliance installation must guarantee easy access for cleaning the appliance itself, discharge gas pipe and flue.

8.6. NATIONAL, REGIONAL, PROVINCIAL AND TOWN COUNCIL REGULATIONS

It is necessary to bear in mind all laws and national, regional, provincial and town council Standards present in the country the appliance has been installed.

9. INSERTS INSTALLATION

The Comfort Idro model is supplied with an iron sliding base that allows to install it in a pre-existing flue.
This sliding base allows the easy extraction of the insert both for pellet feeding inside the feed-box and for any maintenance or cleaning at the end of the season. If there is no pre-existing flue, one can be built using the insert-holder pedestal (optional kit); in fact, the latter fixes the insert to the floor. Image key: primary air (**A),** flue gas exhaust (**B),** frame (**C),** sliding base (**D)**

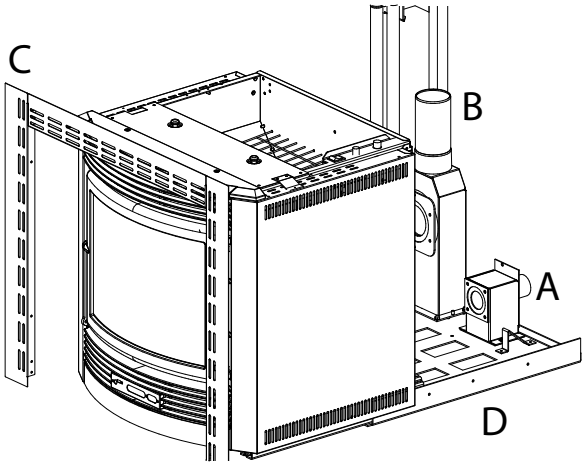


figure 12

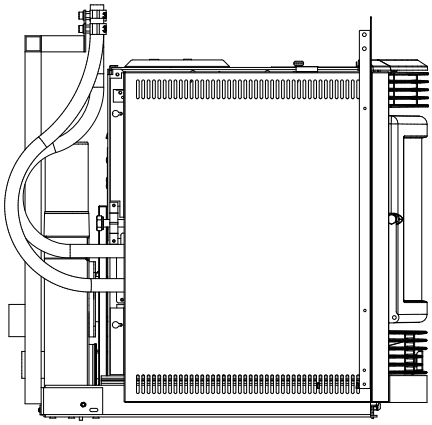


figure 13

9.1. INSERT COMPARTMENT MINIMUM MEASUREMENTS

For correct functioning of the insert, during construction of the flue the measurements between the insert and internal walls of the flue must be respected. From the clearance measurements of the stove given in the technical features, it is necessary to consider at least 70 mm of air in the upper part and 35 mm for each side. **The flue outlet pipe must always maintain a minimum distance of 50 mm from inflammable parts.**

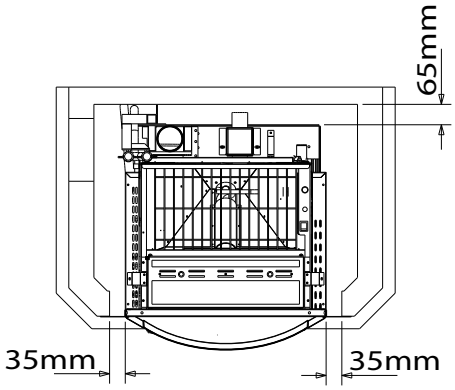


figure 14

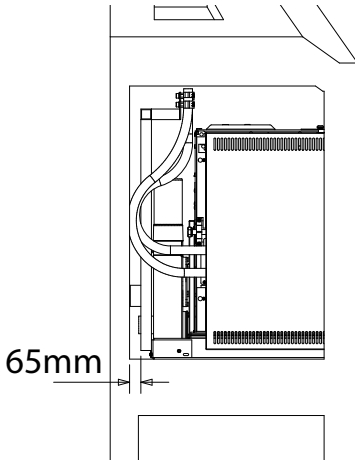


figure 15

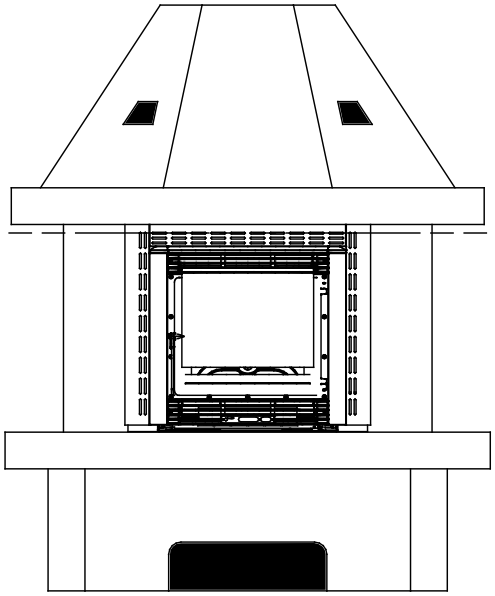


figure 16

9.2. AIR INLETS

Regarding the air intake box, it is possible to apply the intake pipe above the base or below depending on requirements.
These operations must be carried out by a qualified technician and/or the manufacturer's technical after-sales assistance.

Air intake box

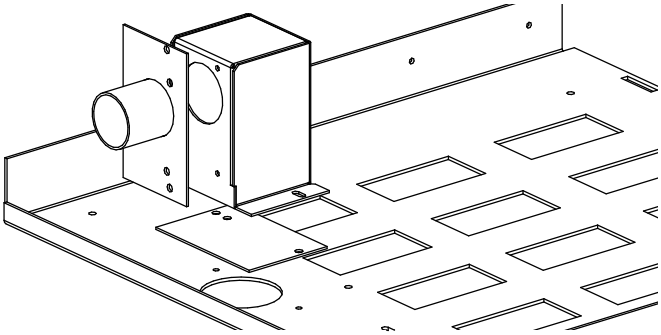


figure 17

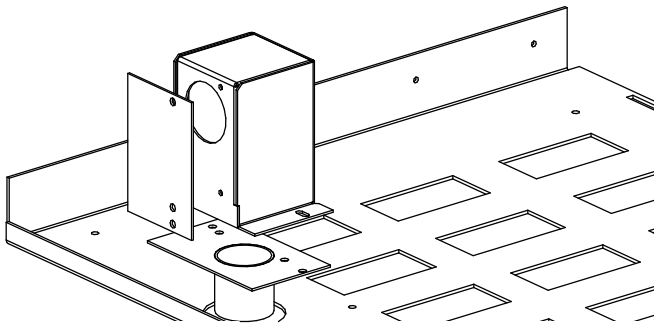


figure 18

9.3. AIR CIRCULATION PIPES

It is necessary to create air recirculation inside the structure that covers the insert for correct functioning. This prevents the appliance from over-heating.

To guarantee this, just realise one or more openings in the lower part and in the upper part of the covering (see figure 15).
The following measurements must be respected:

- **Lower part (cold air inlet) ⇨ total minimum surface 750 cm².**
- **Upper part (hot air outlet) ⇨ total minimum surface 750 cm².**

This ventilation system is totally independent from the air intake for combustion!!

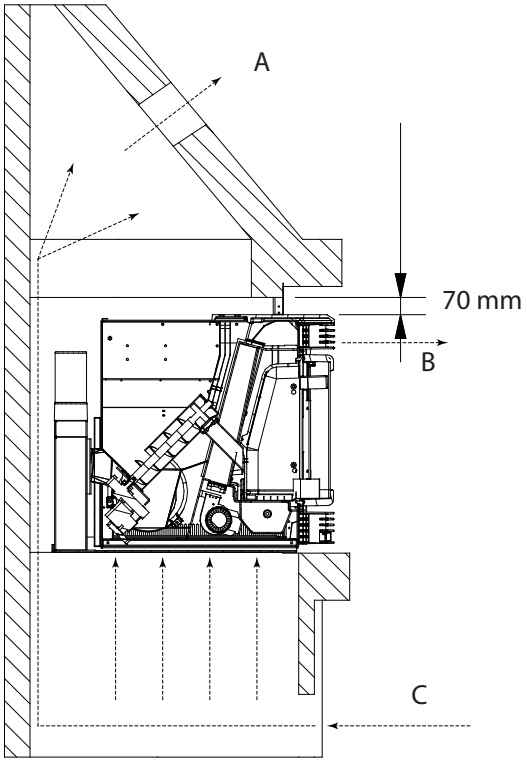


figure 19

A = Hot convection air
The heat accumulated inside the covering must be vented to prevent excessive overheating of the insert.
B = Forced ventilation (in the models envisioned only)
C = Air inlet from the environment to allow convection. For correct functioning of the insert, during construction of the flue the measurements between the insert and internal walls of the flue must be respected.
From the clearance measurements of the stove given in the technical features, it is necessary to consider at least 70 mm of air in the upper part and 35 mm for each side. **The flue outlet pipe must always maintain a minimum distance of 50 mm from inflammable parts.**

9.4. PREPARATION OF THE BASE AND AIR INTAKE

(This installation refers to the chimney without covering)

1.First of all, check the presence of a current socket on the rear of the insert so that the socket is accessible once installation is completed.

2.After having evaluated the correct positioning, remove the two black sides (the procedure for removing the right and left sides is the same)

3. Loosen the screw enough to be able to remove the side

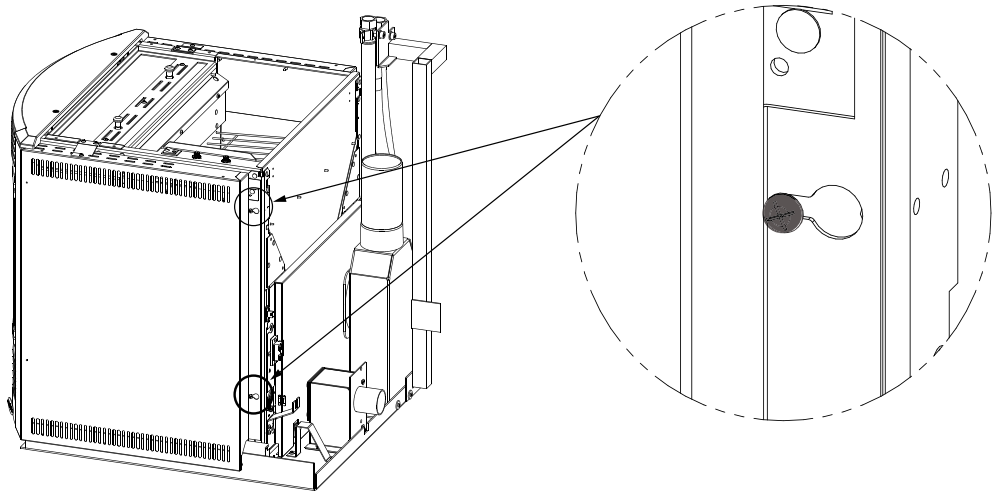


figure 20

4. Remove the fixing bracket by loosening the three screws in a way to be able to remove the side.

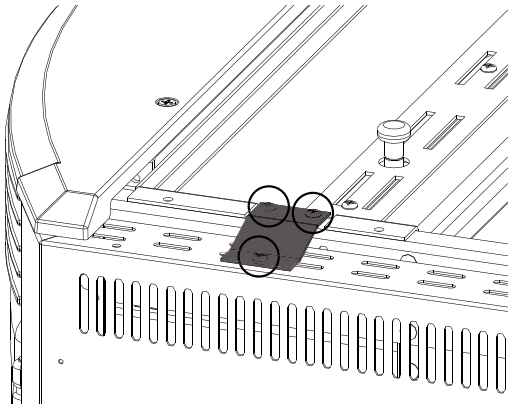


figure 21

5. Release the side, moving it in the direction of the arrow

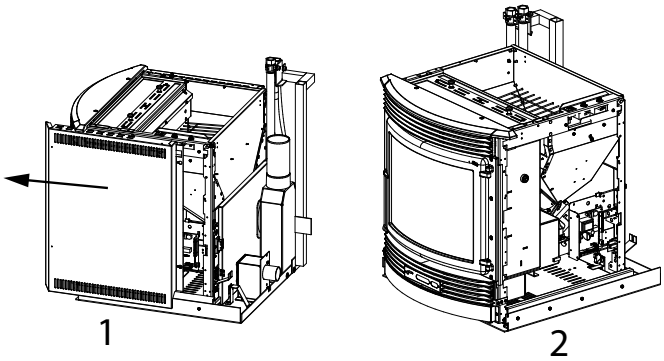


figure 22

6. At this point, release the machine body from the base using the supplied Allen wrench to turn the lockbolt clockwise.

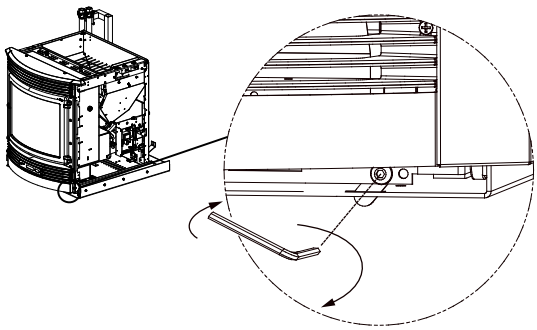


figure 23

7. To extract the insert, pull it up to end run and lift it as in the image below.

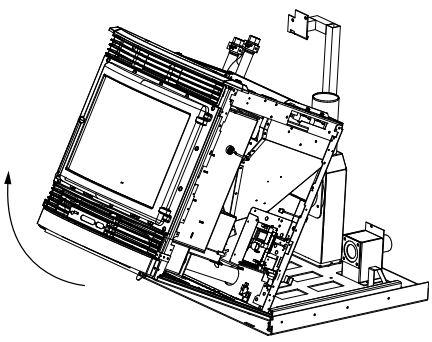


figure 24

ENGLISH

8. Mark the blocking points of the base; then make 8 mm holes for the steel expansion inserts.
Make a hole measuring 60 mm in correspondence with the air intake. **The air vent must be made outside the flue as it must not suck heated air.**

9. Fix the flexible pipe support rod, as indicated in figure by the means of one M5 x 16 screw, the respective galvanised M5 nut and the burnished 3.9 x 22 self-threading screw (the latter must be unscrewed as it is already used to fix the flue conveyor pipe).

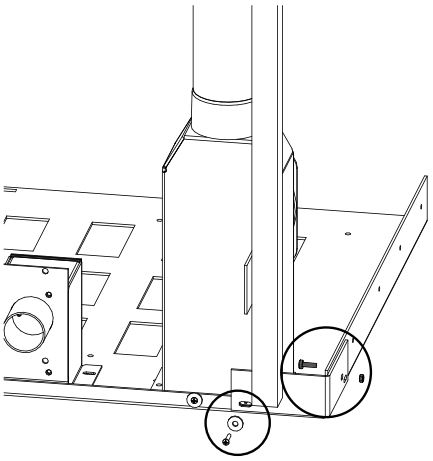


figure 25

10. Fix the 2 collars with washer and burnished TCEI M8 x 10 screw as the latter can only be reached from the rear.

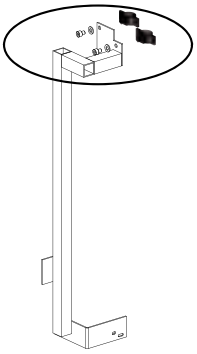


figure 26

11. Fix the base using the locking screws, **the lower grate of the insert must lie at least 1 cm above the fire surface in covering marble.**
12. Appropriately connect the conveyor to the flue evacuation piping and the air intake box to the relative intake pipe.
13. Re-position the machine body, inclining it as in the figure below, to allow it to run in the rails

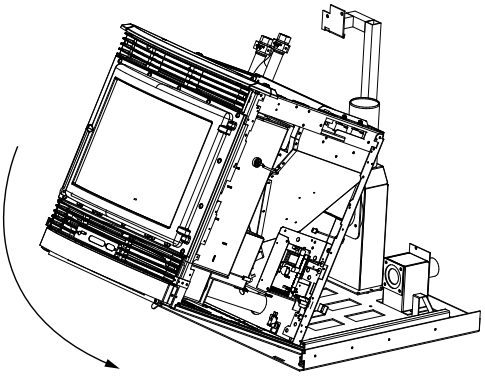


figure 27

14. Connect the flexible water flow and return pipes to the support rod, fixing them to the collars as indicated in figure and detail below, respecting the positioning indicated.
T1: 3 bar safety valve drain
T2: flow
T3: return

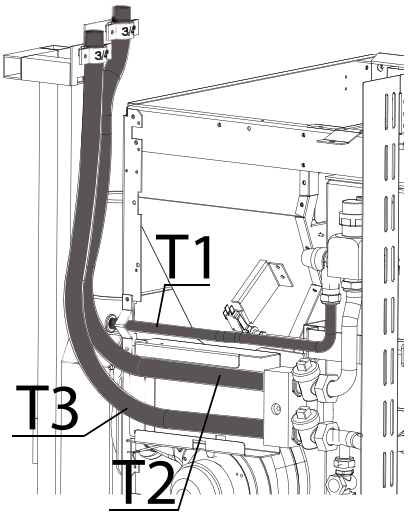


figure 28

15. Re-mount the previously-removed sides and fix the bracket again.

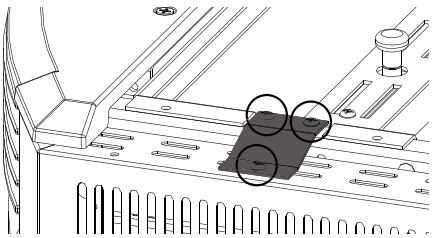


figure 29

9.5. INSERT EXTRACTION

The extraction of the Comfort allows to load pellets inside the feed-box and to perform routine maintenance, (cleaning the ash pipe at the end of the year) or extraordinary maintenance (replacement of mechanical parts if the product should break). **Maintenance operations must be performed when the insert is off, with the plug disconnected from the socket and by an authorised technician and/or the manufacturer's technical after-sales assistance.**

Follow this procedure to extract the insert:

- ❖ Take the relevant Allen wrench and insert it in the screw
- ❖ Turn the wrench clockwise

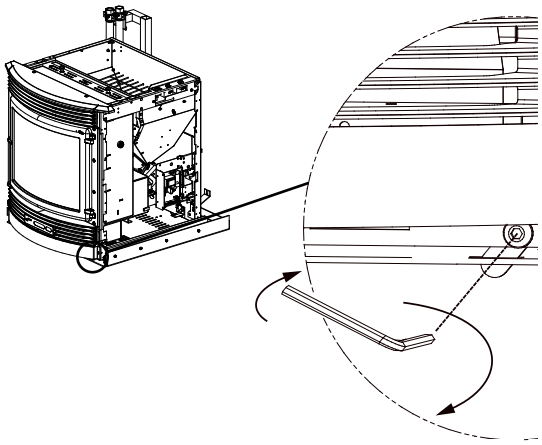


figure 30

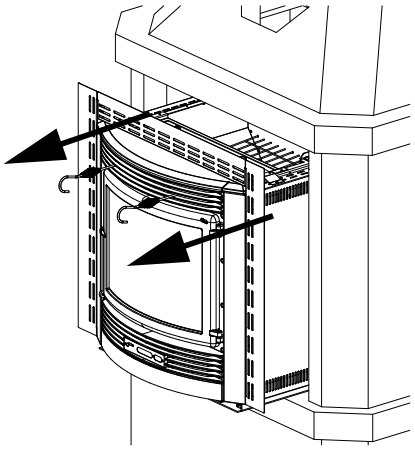


figure 31

- ❖ Using the relevant fire irons, pull the machine towards yourself until it blocks automatically.

9.6. ASSEMBLY ON COVERING ALREADY EXISTING

Release the machine body from the base with the rails using the sequence described previously and fix the base, having already previously positioned the rod for the flexible pipes, following the descriptions up to **point 12 of paragraph 9.4**. (*"Fit the conveyor pipe appropriately to the piping for the evacuation of the flue gases and the air vent box to the relative intake pipe."*).

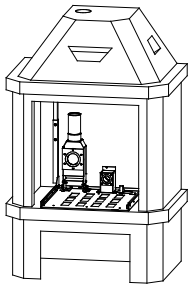


figure 32

13. Remove the flexible pipe guide bracket (coloured in the diagram) by removing the 2 screws that fix it

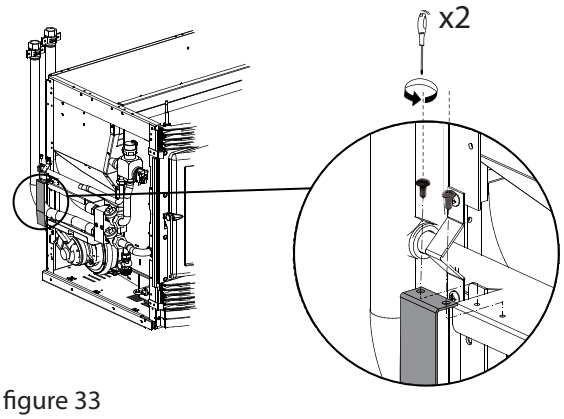


figure 33

14. Loosen the ring nuts on the 2 copper pipes and remove the nut that fixes the brass block to the machine body. At this point it is possible to separate the brass block with the pipes from the rest of the insert.

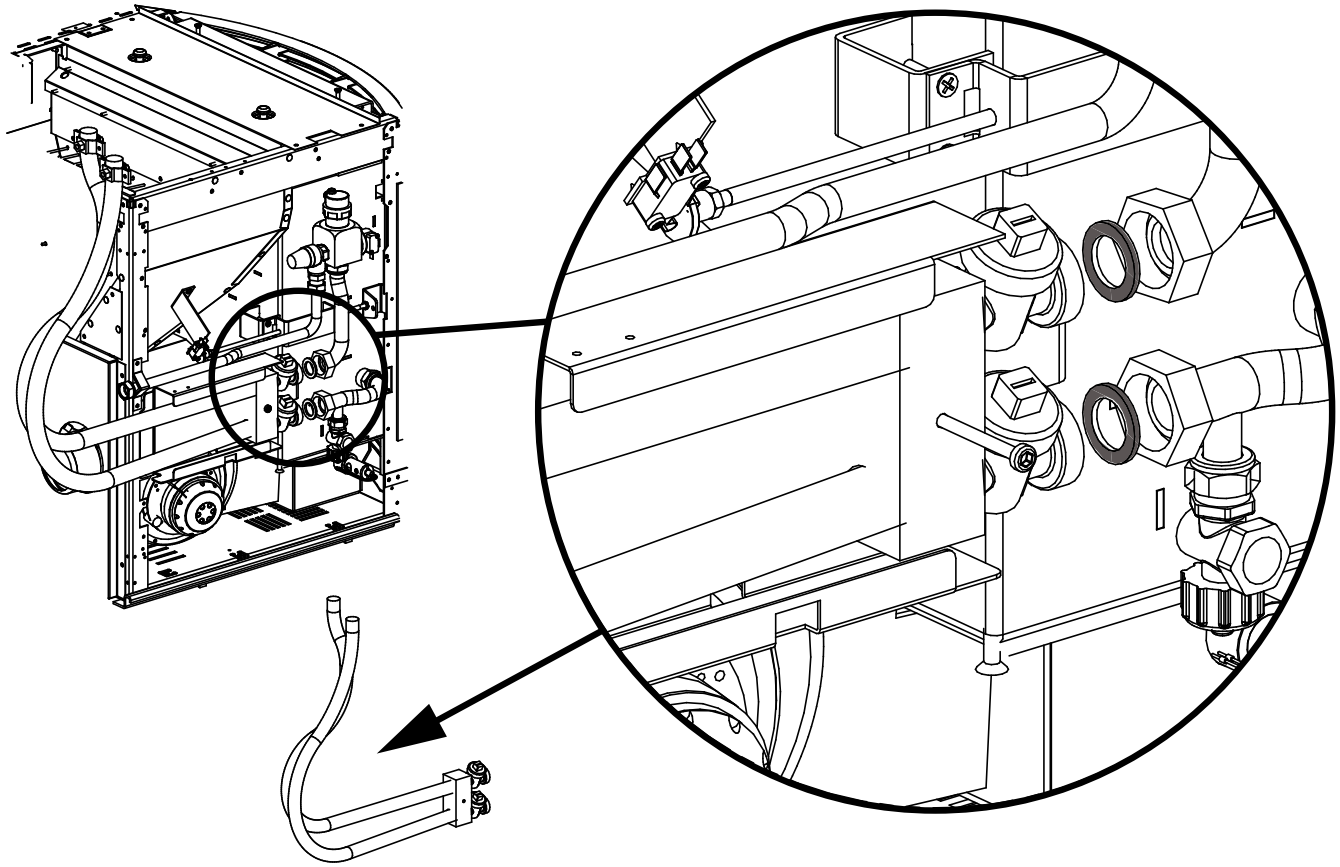


figure 34

15. Connect the flexible pipes to the support rod T1 = return, T2 = flow)

figure 35

16. Re-position the insert in the rails

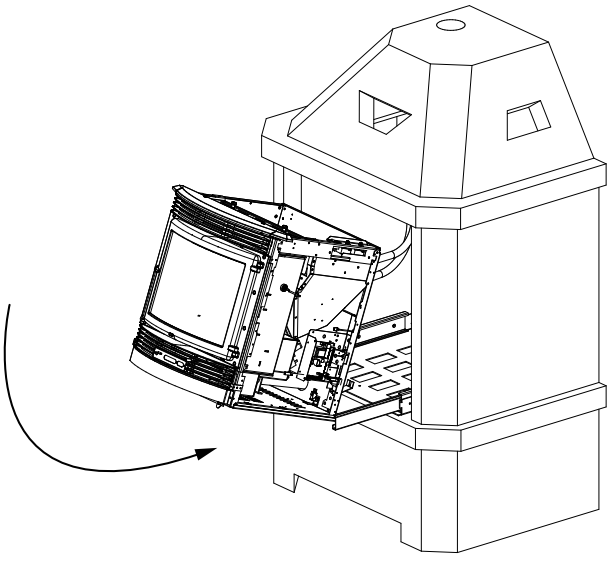


figure 36

17. Fix the brass collector to the copper pipes, remembering to apply the two previously-removed gaskets (figure relative to point 14 of the description) and the collector using the metric screw and relative nut. To ease the operation, the machine must be re-inserted into the rails, but completely outside of the covering.

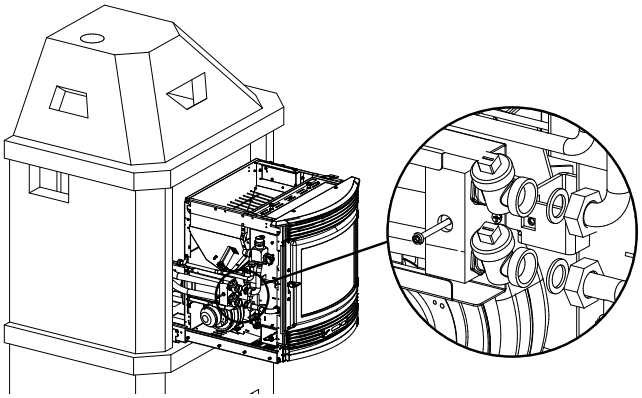


figure 37

18. Fix the bracket again and reposition the left and right sides.

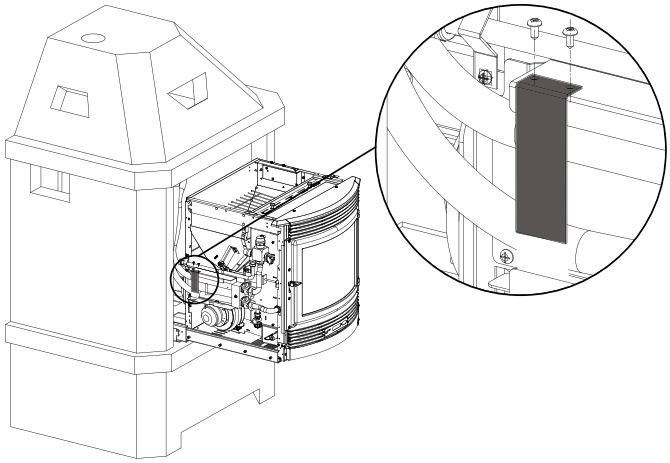


figure 38

10. PELLETS AND FEEDING

The pellets used must comply with the features described by the Standard:

- **Ö-Norm M 7135**
- **DIN plus 51731**
- **UNI CEN/TS 14961**

Extraflame recommends the use of pellets with a diameter of 6mm with its products.

THE USE OF EXPIRED PELLETS OR ANY OTHER MATERIAL DAMAGES THE FUNCTIONS OF YOUR STOVE AND CAN DETERMINE THE INVALIDITY OF THE WARRANTY AND THE ANNEXED RESPONSIBILITY OF THE MANUFACTURER.

To guarantee combustion without problems, the pellets must be kept in a dry place. We recommend the use of pellets with diameter of 6mm with our products. See the images for feeding pellets.

Open the tank lid and load the pellets using a scoop. In the event of the inserts, only load when the machine is off and cold, by extracting it from the compartment. In the event of installation with feeding kit (optional) the machine must not be extracted.

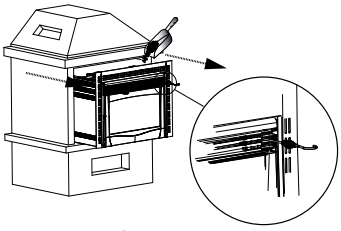


figure 39

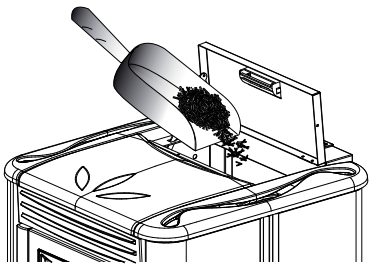


figure 40

11. PRODUCT FUNCTIONALITY

11.1. CONTROL BOARD

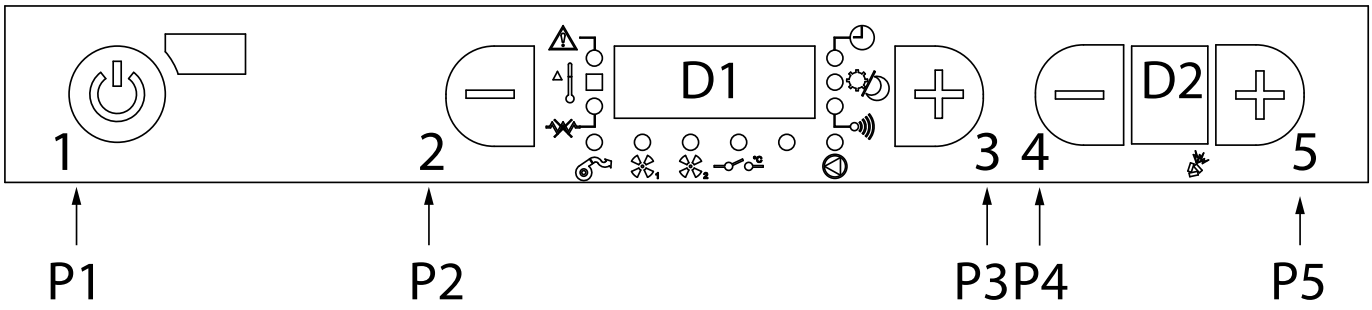


figure 41

P1 ⇨ ON/OFF BUTTON

P2 **P3** ⇨SETTING H2O TEMPERATURE

P4 **P5** ⇨ REGULATION OF FUNCTIONING POWER

D1 ⇨ DISPLAY OF THE VARIOUS TEXT MESSAGES

D2 ⇨ DISPLAY OF THE POWER

11.2. DISPLAY ICONS KEY

	It indicates functioning of the fumes motor. Off = flue gas motor deactivated On = flue gas motor active Flashing = breakdown		It indicates weekly programming functioning Indicator on = Weekly programming active Indicator off = Weekly programming not active
	It indicates functioning of the tangential fan (where present) Off = not working On = working Flashing = motor at maximum		Indicates the stby function Off = Stby deactivated On = Stby activated
	Not used		Indicates the communication between remote control and stove. Every time a key is pressed on the remote control, the indicator must switch-on. If the indicator is always on, it means that the communication between remote control and stove is blocked.*
	Additional thermostat input status Off = open contact On = closed contact		Indicates the presence of an alarm. On: indicates the presence of an alarm Off: indicates the absence of alarms Flashing: indicates the deactivation of the depression sensor.
	Not used		Indicates the water temperature status On = Water T° lower than desired set Off = Water T° higher than desired set
	Pump off = pump deactivated on = pump active		Ign-plug Off = ign-plug active On = ign-plug deactivated Flashing = Ignition phase

12. FUNCTIONING CYCLE

12.1. BASIC INSTRUCTIONS

The following recommendations must be followed the first times the stove is ignited:

- ❖ It is possible that slight odours are produced due to the drying of the paints and silicones used. Do not remain in the environment for long periods.
- ❖ Do not touch the surfaces as they could still be unstable.
- ❖ Air the room well several times.
- ❖ The hardening of the surfaces is terminated after several heating processes.
- ❖ This appliance must not be used to burn waste.

12.2. IGNITION

ATTENTION!

Removal of the divider jeopardises the safety of the product and leads to the immediate voiding of the warranty period. In the event of wear or deterioration request after-sales assistance for replacement of the part (replacement that is not under guarantee as the component is subject to wear).

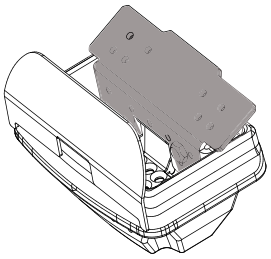


figure 42

ATTENTION!!!
DO NOT USE ANY INFLAMMABLE LIQUIDS FOR IGNITION
DO NOT ALLOW THE BAG OF PELLETS TO COME INTO CONTACT WITH THE BOILING HOT STOVE DURING THE FILLING PHASE
IN THE EVENT OF CONTINUOUS NO IGNITION, CONTACT AN AUTHORISED TECHNICIAN

Before igniting the stove, the following points must be verified:

- ❖ The feed-box must be full of pellets
- ❖ The combustion chamber must be clean
- ❖ The burn pot must be completely free and clean
- ❖ Check the hermetic closure of the fire door and the ash drawer
- ❖ Make sure the power supply cable is connected correctly
- ❖ The bipolar switch in the rear right part must be positioned on 1

Once the points listed above have been checked, press the P1 key for three seconds to ignite the stove.
Once the stove has been ignited, it will pass to start-up in order to go to normal conditions and then normal functioning.

12.3. WORK

Once the machine has been ignited, the machine starts to work.
Regulate the desired water temperature using the P2 and P3 keys.
Set the functioning power (from 1 to 5) using the P4 and P5 keys.

ATTENTION!!!
The lid of the pellet container must always be closed. It must only be opened during the fuel feeding phase.
The bags of pellets must be kept at least 1.5 metres from the stove.
It is recommended that the feed-box is always half full.
Make sure the appliance is off before filling the pellet tank.

The appliance can control the water temperature through a probe installed as per standard, which modulates machine power until the set point set is reached. Once the temperature set has been reached, the machine will work at minimum. If the water temperature exceeded the factory pre-set parameters the machine will got **H OFF** status and switch off.
During the "H Off" status, the machine performs all of the switch-off phase, however, leaving the pump active. If the water temperature drops, exceeding the pre-set parameters, the machine will switch back on.

12.4. PUMP FUNCTIONING

The pump activates water circulation when the temperature of the water inside the stove reaches approx. 60°C. As the pump always functions above 60°, an always-open heating area is recommended to make product functioning homogenous, avoiding overheating blocks. Normally this area is defined "Safety zone".
N.B. "Comfort idro" does not have a pump.

12.5. SWITCH-OFF

Press the P1 key for 3 seconds:
When the operation has been performed, the appliance automatically enters the switch- off phase, blocking the supply of pellets.
The flue exhaust motor and the hot air ventilation motor will remain on until the temperature of the stove has dropped below the factory parameters.

ENGLISH

13. ADDITIONAL THERMOSTAT

N.B. : Installation must be performed by an authorised technician

It is possible to thermostat a room adjacent to the room where the stove is positioned: just connect a thermostat following the procedure described in the next point (it is recommended to position the optional mechanical thermostat at a height of 1.50m from the ground).
Stove functioning with the external thermostat connected in the STBY clamp can be different on the basis of the activation or deactivation of the STBY function.
The STBY clamp leaves the factory jumpered, therefore it is always with closed contact (on request).

13.1. ADDITIONAL THERMOSTAT FUNCTIONING WITH STBY ACTIVE

When the STBY function is active, the LED is on. When the contact or external thermostat is satisfied (contact open/ temperature reached) the stove will switch off. As soon as the contact or external thermostat passes to the "not satisfied" status (closed contact/temperature to reach) it will re-ignite.
Nota bene: stove functioning depends on the temperature of the water inside the same and relative factory restrictions set. If stove is in H OFF (water temperature reached), any additional contact or thermostat request will be ignored.

13.2. ADDITIONAL THERMOSTAT FUNCTIONING WITH STBY DEACTIVATED

When the STBY function is deactivated, the LED is off.
When the contact or external thermostat is not satisfied (open contact/temperature reached), the stove will go to minimum. As soon as the contact or external thermostat passes to the "not satisfied" status (closed contact/temperature to reach) the stove will start to work again at the pre-set power.
Nota bene: stove functioning depends on the temperature of the water inside the same and relative factory restrictions set. If stove is in H OFF (water temperature reached), any additional contact or thermostat request will be ignored.

13.3. ADDITIONAL THERMOSTAT INSTALLATION

- ❖ Switch the appliance off using the master switch positioned on the rear of the stove.
- ❖ Remove the plug from the socket.
- ❖ Refer to the electrical layout to connect the two thermostat cables onto the relative clamps positioned don the rear of the machine, one is red and the other black (STBY clamp). The STBY and AUX clamps can be noted in the diagram below. Every model can have a different position of the relative clamps in the rear of the machine. The image is given as an example.

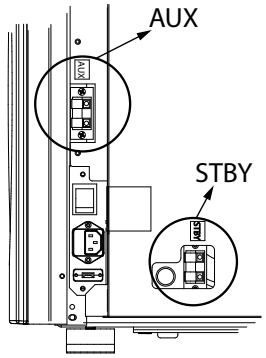


figure 43

14. THE REMOTE CONTROL

Nota bene: the remote control is an optional for the "Rosy" and "Preziosa" models.
The heating power, the desired room temperature and the appliance ignition/switch off, can be adjusted using the remote control.
S = Indicator light indicating the pressing of every key.
Display keys correspondence with remote control keys

P1 = P3 + P5
P2 = P2
P3 = P3
P4 = P4
P5 = P5

*to switch on the stove, simultaneously press keys 3 and 5 for 1 second; the appliance will automatically enter the ignition phase. The power can be regulated using keys 4 and 5 and using keys 2 and 3 it is possible to regulate the desired room temperature. To switch the stove off, press and hold keys 3 and 5 simultaneously for three seconds.

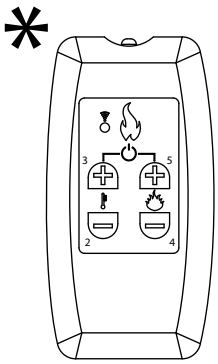


figure 44

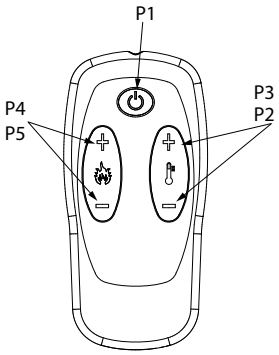


figure 45

14.1. REPLACING THE BATTERIES

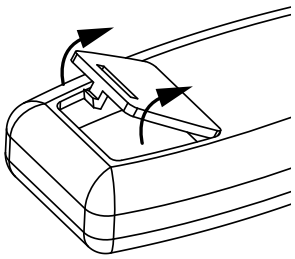


figura 46

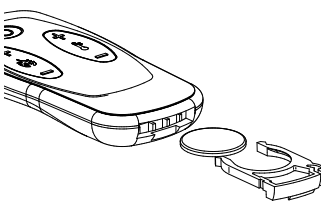


figura 47

15. SETTINGS MENU

MENU	D1		FUNCTION
	SCROLLING TEXT	VALUE	
SET CLOCK	**DAY**	**MON...SUN**	Setting the day of the week
	HOURS	**00...24:**	Adjustment of the hour
	MINUTES	**:00...59**	Adjustment of the minutes
	DATE	**1...31**	Adjustment of the date
	MONTH	**1...12**	Adjustment of the month
	YEAR	**00...99**	Adjustment of the year
SET CHRONO	**ENABLE CHRONO**	**OFF**	Activation/deactivation of the weekly programmer
	START - PRG1	**OFF - 00:00**	Time 1st ignition
	STOP - PRG1	**OFF - 00:00**	Time 1st switch-off
	MONDAY PRG1 OFF ...SUNDAY PRG1 OFF	**ON/OFF**	Ignition/switch-off consents for various days
	SET PRG1	**07 - 35**	Setting room temperature for the 1st time period
	START - PRG2 00:10	**OFF - 00:00**	Time 2nd ignition
	STOP - PRG2 00:10	**OFF - 00:00**	Time 2nd switch-off
	MONDAY PRG2 OFF ...SUNDAY PRG2 OFF	**ON/OFF**	Ignition/switch-off consents for various days
	SET PRG2	**07 - 35**	Setting room temperature for the 2nd time period
	START - PRG3 00:10	**OFF - 00:00**	Time 3rd ignition
	STOP - PRG3 00:10	**OFF - 00:00**	Time 3rd switch-off
	MONDAY PRG3 OFF ...SUNDAY PRG3 OFF	**ON/OFF**	Ignition/switch-off consents for various days
	SET PRG3	**07 - 35**	Setting room temperature for the 3rd time period
	START - PRG4 00:10	**OFF - 00:00**	Time 4th ignition
	STOP - PRG4 00:10	**OFF - 00:00**	Time 4th switch-off
	MONDAY PRG4 OFF ...SUNDAY PRG4 OFF	**ON/OFF**	Ignition/switch-off consents for various days
	SET PRG4	**07 - 35**	Setting room temperature for the 4th time period
LANGUAGE	**ITAL - ENGL - DEUT - FRAN - ESPA**		Selecting the language
USER	**SET THERMOSTAT**	**OFF..6C..40C**	Room temperature setting for front air fan (in the models envisioned)
	ENABLE FAN		enable/disable the motor functioning for the front air fan (in the models envisioned)
	DISPLAY	**1...20**	Selecting display brightness
	PELLETS	**-20...+20**	Selecting the percentage of pellet feed
	STAND - BY	**OFF - ON**	Activation or deactivation of the stand-by function
	KEYS LOCKED	**OFF - ON**	Activation or deactivation of the keys locked function
TECHNICIAN	The following menu is reserved for the technical after-sales staff		

15.1. SET CLOCK

Clock set allows to adjust the time and date

Controls procedure

- From the OFF status, press the **P5** key for 3 seconds
- The stove will show **SET CLOCK**
- Press the **P5** key, **DAY** will be displayed
- Modify the day by pressing the **P2** key or the **P3** key, press the **P5** key to continue, **HOURS** will be displayed, modify the value using the **P2** or **P3** keys.
- Adjust the hours, press the **P5** key
- For the other values continue as indicated by consulting the table below

ENGLISH

SET CLOCK	day	Mon, Tue, Wed, ...Sun
	hours	0...23
	minutes	00...59
	date	1...31
	month	1...12
	year	00...99

To go back to selection of the hours, press button P4 again or escape and confirm using button P1.

15.2. CHRONO

The chrono allows to program 4 time periods within a day to use every day of the week. The switch-on and switch-off time can be set in every time period. along with the days of use of the programmed time period and the desired temperature.

15.2.1. RECOMMENDATIONS

❖ The ignition and switch-off times must be within the arc of one day, from 0 to 24 and not over several days:

E.g. ignition 07:00 / switch-off 18:00 OK
ignition 22:00 / switch-off 05:00 ERROR

❖ Before using the chrono function, set the current day and time, therefore check that the points listed in the "*Set clock*" sub-chapter have been followed.
❖ To make the chrono function work, it must be activated as well as programmed.

15.2.2. PROGRAMMING EXAMPLE

Let's suppose that the weekly programmer function is to be used and 3 time periods are to be used in the following way:
1st time period: from 08:00 to 12:00 every day of the week, with room temperature at 19°C, excluding Saturday and Sunday
2nd time period: from 15:00 to 22:00 only Saturday and Sunday with room temperature at 21°C
3rd time period: not used
4th time period: not used

Let's set the weekly programmer as per example.

ACTIVATION OF THE CHRONO

❖ Press the P5 key for three seconds, **SET CLOCK** will appear
❖ Press the P3 key once, **SET CHRONO** scrolling text will appear
❖ Press the P5 key once, **ENABLE CHRONO** and **OFF** scrolling text will appear
❖ Press the P3 key once, **ENABLE CHRONO** and **ON** scrolling text will appear

Nota bene: When the weekly programmer is active, the LED of the relative icon will switch-on on the control board.

At this point, press the P5 to confirm and continue programming. The **START PRG1 OFF** scrolling text will appear.

Let's set the time periods as per example:

SETTING FIRST TIME PERIOD SWITCH-ON TIME

❖ Use the P2 or P3 buttons to set the time "08:00", which corresponds to the switch-on time of the 1st time period. The **START PRG1** scrolling text will appear followed by the time set
❖ To confirm and continue programming, press the P5 button. Press the P4 button to go back to the previous parameter.

SETTING FIRST TIME PERIOD SWITCH-OFF TIME

Use the P2 or P3 buttons to set the time "12:00", which corresponds to the switch-off time of the 1st time period. The **STOP PRG1** text will appear followed by the time set
❖ To confirm and continue programming, press the P5 button. Press the P4 button to go back to the previous parameter.

ACTIVATION OF THE TIME PERIOD FOR SELECTED DAYS AS PER EXAMPLE

Activate the first time period for every day of the week except Saturday and Sunday. To do this use the P2 , P3 and P5 keys in the following way:
❖ P5 key - scrolls the various days, the scrolling text will appear with the day of the week, followed by **OFF**
❖ P2 and P3 key- enables/disables (**ON/OFF**) the 1st time period for that day
❖ To change day, press the P5 key

The table below indicates the activations and deactivations of the week for the first time period

Day	Initial value	Key function P2 o P3	Final value	Key function P5
MONDAY	**OFF**	**OFF** to **ON** and vice versa	**ON** (active time period)	Go to next day
TUESDAY	**OFF**	**OFF** to **ON** and vice versa	**ON** (active time period)	Go to next day
WEDNESDAY	**OFF**	**OFF** to **ON** and vice versa	**ON** (active time period)	Go to next day

THURSDAY	**OFF**	**OFF** to **ON** and vice versa	**ON** (active time period)	Go to next day
FRIDAY	**OFF**	**OFF** to **ON** and vice versa	**ON** (active time period)	Go to next day
SATURDAY	**OFF**	**OFF** to **ON** and vice versa	**OFF** (time period deacti-vated)	Go to next day
SUNDAY	**OFF**	**OFF** to **ON** and vice versa	**OFF** (time period deacti-vated)	Go to next day

SETTING THE TEMPERATURE FOR THE FIRST TIME PERIOD

- ❖ Press the P5 key, **SET PROG1** will appear followed by a temperature
- ❖ Regulate the temperature using the P2 or P3 keys, **SET PRG1** will appear followed by the temperature set
- ❖ Press the P5 key to pass to the second time period

At this point, the second time period must be programmed

SETTING SECOND TIME PERIOD SWITCH-ON TIME

- ❖ Use the P2 or P3 buttons to set the time "15:00", which corresponds to the switch-on time of the 2nd time period. The **START PRG2** scrolling text will appear followed by the time set
- ❖ To confirm and continue programming, press the P5 button.

Press the P4 button to go back to the previous parameter.

SETTING SECOND TIME PERIOD SWITCH-OFF TIME

Use the P2 or P3 buttons to set the time "22:00", which corresponds to the switch-off time of the 2nd time period. The **STOP PRG2** text will appear followed by the time set

- ❖ To confirm and continue programming, press the P5 button.

Press the P4 button to go back to the previous parameter.

ACTIVATION OF THE TIME PERIOD FOR SELECTED DAYS AS PER EXAMPLE

Activate the second time period for Saturday and Sunday. To do this use the P2, P3 and P5 keys in the following way:

- ❖ P5 key - scrolls the various days, the scrolling text will appear with the day of the week, followed by **OFF**
- ❖ P2 and P3 key- enables/disables (**ON/OFF**) the 2nd time period for that day
- ❖ to change day, press the P5 key

SETTING THE TEMPERATURE FOR THE SECOND TIME PERIOD

- ❖ Press the P5 key, **SET PROG2** will appear followed by a temperature
- ❖ Regulate the temperature using the P2 or P3 keys, **SET PRG2** will appear followed by the temperature set
- ❖ Press the P5 key to pass to the second time period

Exit programming completely by pressing the P1 key several times.

DEACTIVATION OF THE CHRONO

- ❖ Press the P5 key for three seconds, **SET CLOCK** will appear
- ❖ Press the P3 key once, **SET CHRONO** scrolling text will appear
- ❖ Press the P5 key once, **ENABLE CHRONO** and **ON** scrolling text will appear
- ❖ Press the P3 key once, **ENABLE CHRONO** and **OFF** scrolling text will appear

The manual controls, from the display or remote control, always remain priority with respect to programming.

15.2.3. CHRONO MENU TABLE

The following table gives all weekly programmer function parameters.

MENU	D1		VALUE ADJUSTMENT	KEY KEYS
SET CHRONO	ENABLE CHRONO	OFF	P2 P3	P5
	START - PRG1	OFF - 00:00		
	STOP - PRG1	OFF - 00:00		
	MONDAY PRG1 OFF ...SUNDAY PRG1 OFF	ON/OFF		
	SET PRG1	07 - 35		
	START - PRG2 00:10	OFF - 00:00		
	STOP - PRG2 00:10	OFF - 00:00		
	MONDAY PRG2 OFF ...SUNDAY PRG2 OFF	ON/OFF		
	SET PRG2	07 - 35		
	START - PRG3 00:10	OFF - 00:00		
	STOP - PRG3 00:10	OFF - 00:00		
	MONDAY PRG3 OFF ...SUNDAY PRG3 OFF	ON/OFF		
	SET PRG3	07 - 35		
	START - PRG4 00:10	OFF - 00:00		
	STOP - PRG4 00:10	OFF - 00:00		
	MONDAY PRG4 OFF ...SUNDAY PRG4 OFF	ON/OFF		
	SET PRG4	07 - 35		

ENGLISH

15.3. LANGUAGE

It is possible to select the preferred language to display the various messages.

Controls procedure

Press the P5 key for 3 seconds. The SET CLOCK scrolling text will appear. Press the P3 key until LANGUAGE is displayed. Press the P5 key once and select the language with the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

15.4. USER

The **USER** menu allows the final customer different stove settings.

15.4.1. SET THERMOSTAT

The following menu allows to set the room temperature for those products with front air fan. Once the set temperature has been reached, the fan will go to minimum. The room temperature will be displayed alternately with the water temperature on the display.

Controls procedure

Press the P5 key for 3 seconds. The SET CLOCK scrolling text will appear. Press the P3 key until USER is displayed. Press the key P5 until SET THERMOSTAT is displayed and select the desired room temperature using the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

15.4.2. ENABLE FAN

This menu allows (for the models envisioned) to enable or disable the functioning of the tangential fan

Controls procedure

Press the P5 key for 3 seconds. The SET CLOCK scrolling text will appear. Press the P3 key until USER is displayed. Press the P5 key to display ENABLE AIR and select ON or OFF using the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

15.4.3. DISPLAY

This menu allows to regulate the brightness of the display.

Controls procedure

Press the P5 key for 3 seconds. The SET CLOCK scrolling text will appear. Press the P3 key until USER is displayed. Press the P5 key until DISPLAY is shown and select the brightness of the display using the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

15.4.4. PELLETS

The following menu allows the adjustment of pellet feed as a percentage.
If the stove has functioning problems owing to the quantity of pellets, adjust pellet feeding directly from the control board.
The problems correlated to the amount of fuel can be divided into 2 categories:

NO FUEL

- ❖ The stove can never develop a suitable flame, tending to remain very low even at high powers.
- ❖ At minimum power the stove tends to almost switch-off taking the stove into "**NO PELLETS**" alarm condition.
- ❖ When the stove displays the "**NO PELLETS**" alarm, there may be non-burned pellets inside the burn pot.

EXCESS FUEL:

- ❖ The stove develops a very high flame even at low power.
- ❖ The panoramic glass is very dirty, obscuring it almost totally.
- ❖ The burn pot tends to become encrusted, blocking the holes for air intake due to the excessive pellet feed, as it is only burned partially.

If the problem occurs after only a few months working, check that routine cleaning stated in the stove booklet, has been carried out correctly.

The regulation to be performed is a percentage. Therefore a modification of this parameter will lead to a proportional variation of all stove feeding speeds.

Controls procedure

Press the P5 key for 3 seconds. TheSET CLOCK scrolling text will appear. Press the P3 key until USER is displayed. Press the P5 key until PELLET is displayed and select the value using the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

Adjustment example
NO FUEL: Increase the percentage value by 5 points and try the stove with the new calibration for at least half an hour. If the problem is attenuated, but not solved, increase by another 5 points. Repeat the operation until the problem is solved. If the problem cannot be resolved, contact the after-sales service.
EXCESS FUEL: Decrease the percentage value by 5 points and try the stove with the new calibration for at least half an hour. If the problem is attenuated, but not solved, decrease by another 5 points. Repeat the operation until the problem is solved. If the problem cannot be resolved, contact the after-sales service.

15.4.5. STAND - BY

The Stby function is used if immediate stove switch-off or modulation via additional external thermostat is desired.
The STBY function can be set at ON or OFF using the procedure that will be described. In the factory the STBY function is always set at OFF (indicator off)

15.4.5.1. STBY WITH ADDITIONAL EXTERNAL THERMOSTAT

If an additional external thermostat is used (see *"Optional additional external thermostat" chapter)* the stove will behave as described below. Commissioning must take place in manual mode.

STBY FUNCTION SET AT ON

With the stby function set at ON: when the additional thermostat has a request (closed contact) the stove switches-on automatically and works to reach the temperature set, showing **WORK.** When the additional external thermostat detects that the temperature has been reached (open contact), the stove switches off after a delay pre-set in the factory, displaying **STAND BY.**

STBY FUNCTION SET AT OFF

With the stby function set at OFF, the stove functions in this way: after ignition (pressing key 1 or via chrono mode), the stove will work to reach the set set in the thermostat, displaying **WORK**. When the room thermostat detects that the room temperature has been reached (open contact), the stove will go to minimum.

15.4.5.2. HOW TO ACTIVATE OR DEACTIVATE STAND - BY

Controls procedure

Press the P5 key for 3 seconds. The SET CLOCK scrolling text will appear. Press the P3 key until USER is displayed. Press the P5 key until STAND - BY is displayed and select ON or OFF using the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

15.4.6. KEYS LOCKED

The menu allows to lock the display keys (like mobile phone).

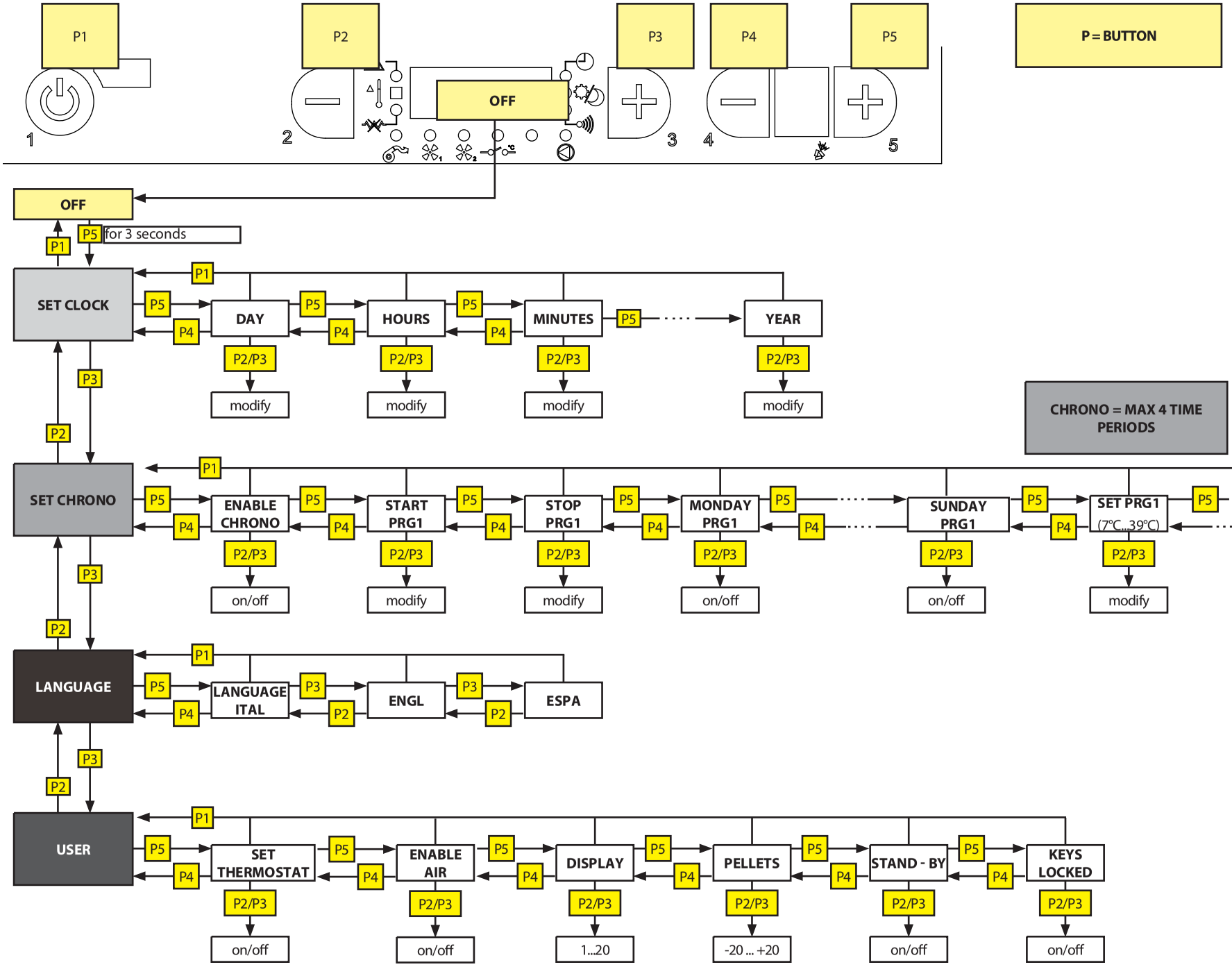
Controls procedure to lock the keys

With KEYS LOCKED function set at ON:
Press the P1 and P5 keys together. To deactivate the function, press the two keys together again. With the function inserted, every time a key is pressed, "keys locked" will appear.

Controls procedure for activation of the function

Press the P5 key for 3 seconds. TheSET CLOCK scrolling text will appear. Press the P3 key until USER is displayed. Press the P5 key until KEYS LOCKED is displayed and select ON or OFF using the P2 and P3 keys. Confirm the selection using the P1 key. Press the same key several times to exit the menu completely.

ENGLISH


P1
P2
P3
P4
P5
P = BUTTON
OFF
1
2
3
4
5
OFF
P5 for 3 seconds
P1
SET CLOCK
DAY
HOURS
MINUTES
YEAR
P2/P3
modify
CHRONO = MAX 4 TIME PERIODS
SET CHRONO
ENABLE CHRONO
START PRG1
STOP PRG1
MONDAY PRG1
SUNDAY PRG1
SET PRG1 (7°C...39°C)
START PRG4
on/off
LANGUAGE
LANGUAGE ITAL
ENGL
ESPA
USER
SET THERMOSTAT
ENABLE AIR
DISPLAY
PELLETS
STAND - BY
KEYS LOCKED
1...20
-20 ... +20

16. CLEANING UNDER USER'S RESPONSIBILITY

Some images could be offset from the original model.

DAILY

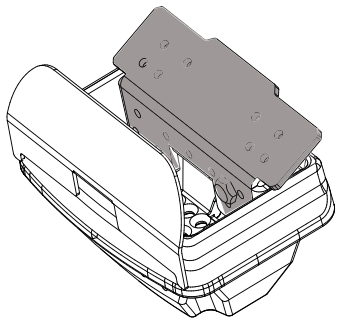


figure 48

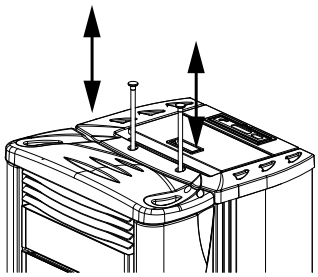


figure 49

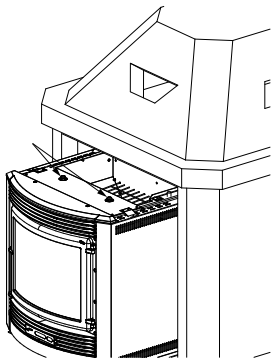


figure 50

Burn pot: remove the burn pot from the relevant compartment and free the holes using the appropriate fire irons supplied, remove the ash from the burn pot using a suction device. Suck the ash deposited in the burn pot compartment.

Scrapers: use the scrapers, using an upward movement (for models with upper scrapers) or pulling and pushing the same (for the inserts and models with front scrapers).

WEEKLY **Cleaning the ash drawer:** empty the ash drawer every week or when required. For the inserts, suck with relevant ash suction device.

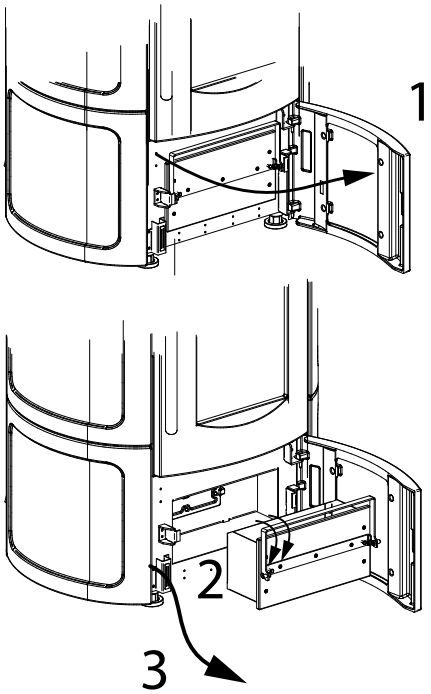


figure 51

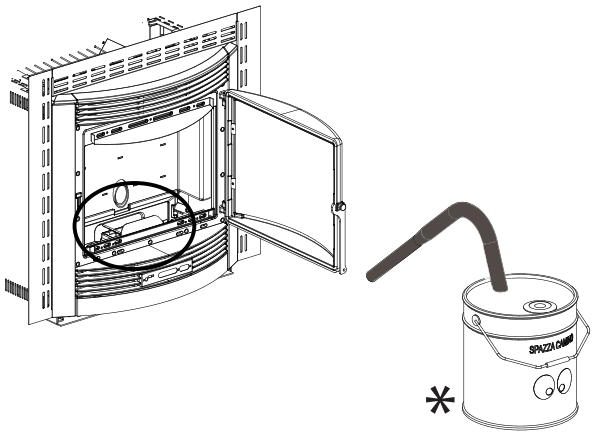


figure 52

Make sure that the ash is completely cold before emptying it into a suitable container.
*** The "Chimney sweep" bin is an accessory available from the company. For further information, contact info@extraflame.it.**

ENGLISH

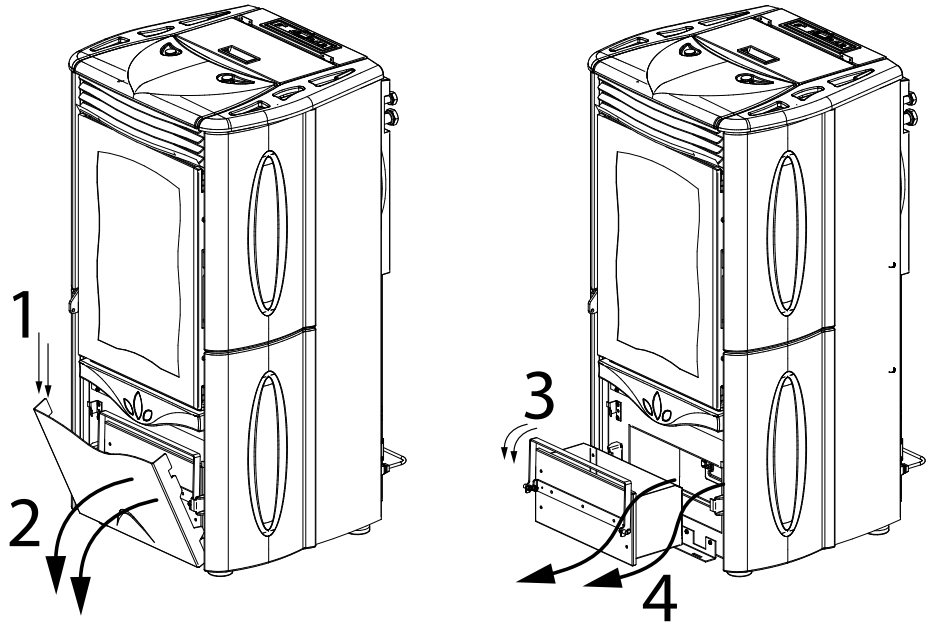


figure 53

TECHNICIAN YEARLY CLEANING

A Fumes motor (disassembly and cleaning and fumes pipe), new silicone in envisioned points ☑

B Gaskets inspections, ash drawer and door (replace them and apply silicone where envisioned) ☑

C Chamber turbulators ☑

D Feed box (complete emptying and cleaning). ☑

E Room air fan disassembly (where present) and removal of dust and debris of any pellets ☑

F Check air intake pipe and cleaning of the flow sensor ☑

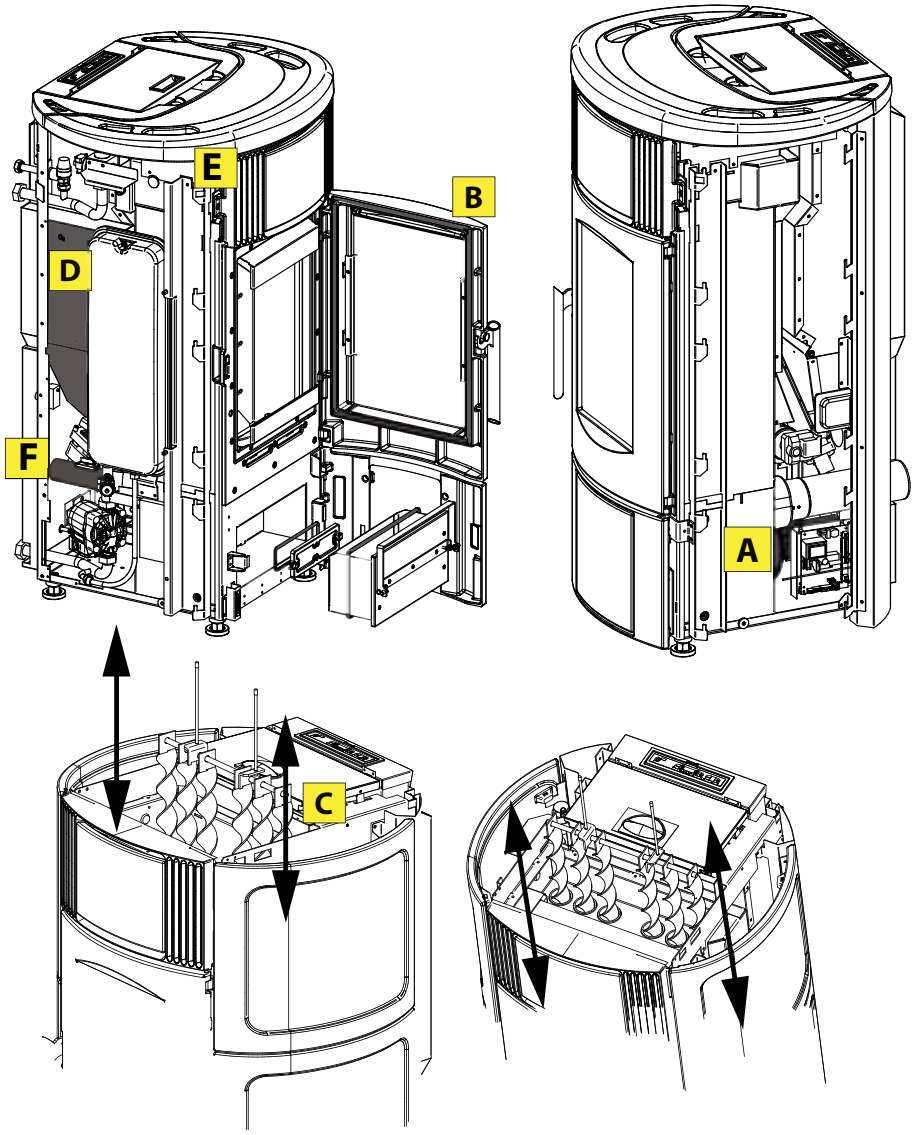


figure 54

17. DISPLAYS

Display	Reason	Solution
START	The start phase is in progress	_
PELLET LOADING	The continuous feeding of the pellets during the ignition phase is in progress	_
IGNITION	The ignition phase is in progress	
START-UP	The start-up phase is in progress	_
BURN POT CLEANING	The automatic burn pot cleaning is in progress	_
FINAL CLEANING	The final cleaning is in progress	_
COOLING STAND-BY	Attempt to release the alarm with stove still in cooling mode.	Every time the stove displays one of the alarms listed above it will switch-off automatically. The alarm can only be released using button 1 when it switch-off has been completed. The stove can only be switched back on when it completely cold
WORK	The normal working phase is in progress, the stove is working at the power set	-
MODULATION	The stove is working at minimum	-
STAND - BY	Stove off waiting for re-ignition due to an external thermostat	The stove will only re-start when the external thermostats makes a request
COOL. STDBY-BLACK OUT	The stove is cooling after a power cut.	Once cooling is completed it will automatically ignite
ROOM T.	Displays room temperature (in the models that envision it)	-
HOFF	Stove off due to water temperature over set	As soon as the water temperature drops below the pre-established parameters, the stove will switch back on
ANTI-FREEZE	The anti-freeze function is in progress as the H2O t° is below the factory set threshold	The pump is active until the water reaches the pre-set factory parameter +2°C
ANTILOCK	The pump anti-blocking function is in progress (only if the stove has been in Off status for at least 96 hours)	The pump is active for the time pre-established by the builder, in a way to prevent its blocking

18. ALARMS

DISPLAY	EXPLANATION	SOLUTION
	Indicates the presence of an alarm.	On: indicates the presence of an alarm Off: indicates the absence of alarms Flashing: indicates the deactivation of the depression sensor. The alarm can be reset by pressing key 1 for 3 seconds only if the fumes motor has stopped and if 15 minutes have passed from displaying the same alarm.
FUMES FAILURE = AL4	Flue gas motor fault	**contact after-sales centre**
FUMES PROBE = AL2	Fumes probe failure.	**contact after-sales centre**
HOT FUMES = AL3	High flue gas temperature	Control pellet feed (see "*Pellet feed regulation*"). If the problem cannot be solved, contact authorised technician.
NO FLOW ALARM =AL8	The door is not closed correctly. The ash drawer is not closed correctly. The combustion chamber is dirty. The flue exhaust pipe is blocked.	Check hermetic door closure. Check hermetic closure of the ash drawer. Check cleanliness of the fumes pipe and the combustion chamber.
NO IGNITION =AL5	The pellet feed-box is empty. Pellet feed calibration inadequate.	Check for the presence of pellets in the feed-box. Adjust pellet flow (see "*Pellet feed adjustment*"). Check the procedures described in the "*Ignition*" chapter.
BLACK-OUT NO IGN. = AL1	No current during the ignition phase.	Take the stove to **OFF** conditions using key 1 and repeat the procedure described in the "Ignition" chapter.
NO PELLETS = AL6	The pellet feed-box is empty. No pellet feed. The motor reducer does not feed pellets.	Check for the presence of pellets in the feed-box. Adjust pellet flow (see "*Pellet feed adjustment*").
DEPR ALARM=AL7	The door is not closed correctly. The ash drawer is not closed correctly. The combustion chamber is dirty. The flue exhaust pipe is blocked	Check hermetic door closure. Check hermetic closure of the ash drawer. Check cleanliness of the fumes pipe and the combustion chamber.
DEPR SENSOR DAMAGE =AL C	Flow sensor faulty sensor disconnected	Contact after-sales centre
H2O OVERTEMP ALARM =AL A	The water in the stove has exceeded 95°C. Possible air in the system. Insufficient circulation. No or inadequate safety zone. Possible pump anomaly.	Contact after-sales centre
MIN PRESSURE ALARM =AL D	The system pressure read by the pressure switch is too low. Possible presence of air in the system. Possible lack of water or leaks due to anomalies in some system component.	Contact after-sales centre
H2O PROBE ALARM	H2O probe failure	

19. WARRANTY CONDITIONS

EXTRAFLAME S.p.A., with offices in via dell'Artigiananto 10 Montecchio Precalcino (VI), guarantees this product for 2 (two) YEARS from purchase date for manufacturer and material faults. The warranty becomes void in case the defect of conformity is not filed with the dealer within two months from date of its finding.

The responsibility of EXTRAFLAME S.p.A. is limited to the supply of the appliance, which must be perfectly installed, following the indications contained in the appropriate manuals and books provided with the purchased product and in compliance with the laws in force. **Installation must be performed by qualified staff, under the responsibility of the person entrusting him, who will assume complete responsibility for the definitive installation and consequent good functioning of the product installed. EXTRAFLAME S.p.A. cannot be held responsible for the failure to comply with such precautions.**

WARNING

It is essential to carry out the functioning inspection of the product before its completion with the relative masonry finishings (counterhood, external coating, pilasters, wall painting, etc). EXTRAFLAME S.p.A. does not assume any responsibility for any damages and consequent restore expenses of the above finishings even if the same occur following the replacement of malfunctioning particulars.

EXTRAFLAME S.p.A. assures that all its products are manufactured with top quality materials and with manufacturing techniques which guarantee total efficiency. If during normal use of the product, defective or badly working particulars should be detected, the replacement of such particulars will be free of charge, ex dealer who made the sale.

TERRITORIAL EXTENSION OF THE WARRANTY

Italian territory

VALIDITY

The warranty is considered valid on the condition that:
The purchaser sends the attached coupon within 8 days from the purchase date, filled-in in its every part. The purchase date must be validated by the possession of a valid fiscal document issued by the dealer.
The appliance is installed in compliance with the Standards in force on this subject, the prescriptions contained in the provided manual and by professionally qualified staff.
The appliance is used as prescribed in the instructions manual provided with all products.
The warranty certificate has been filled-in and signed by the customer, validated by the dealer.
The warranty document, filled-in and accompanied by the purchase fiscal document issued by the dealer, must be kept and shown to staff of the EXTRAFLAME S.p.A. Technical After-sales Service in the event of intervention.

The warranty is not considered valid in the following cases:
The warranty conditions described above have not been respected.
Installation has not been performed with respect to the Standards in force regarding the provisions described in the manual/book provided with the appliance.
Negligence of the customer due to lack of or incorrect maintenance of the product.
Presence of electric and/or hydraulic plants that do not comply with the standards in force.
Damages deriving from atmospheric, chemical, electro-chemical agents, improper use of the product, modifications and tampering with the product, inefficacy and/or unsuitability of the flue and/or other causes not deriving from the manufacture of the product.
Combustion of materials not compliant with the types and quantities indicated in the manual/book supplied
All damages caused by transport. It is therefore recommended to carefully check the goods on receipt, immediately informing the dealer of any damage, making a note on the transport document and on the carrier's copy.

EXTRAFLAME S.p.A. is not liable for any damage that can, directly or indirectly, affect persons, objects and pets as a consequence of failure to comply with the prescriptions indicated in this manual/book.
All particulars subject to normal wear are not covered by warranty:
This category includes:
The gaskets, all ceramic or toughened glass, coverings and cast iron or Ironker grids, the painted, chrome or gold-plated details, the majolica, the handles and the electric cables.
Colour variations, crackles and slight size differences of the majolica parts are not a reason for claims, as they are natural features of the materials themselves.
Parts in refractory material
Masonry work
The system particulars for the production of domestic hot water not supplied by EXTRAFLAME S.p.A. (water products only).
The heat exchanger is excluded from the warranty unless an adequate anti-condensate circuit is realised, which guarantees a minimum return temperature of the appliance of at least 55°C (only water products).

Further clauses:
The warranty also excludes any calibration or regulation interventions of the product in relation to the type of fuel or the type of installation.
The warranty is not extended if particulars are replaced.
No compensation will be paid for the time the product is inefficient.
This warranty is valid only for the purchaser and cannot be transferred.

Recommended inspection (with payment):
EXTRAFLAME S.p.A. recommends that the functional inspection of the product is performed by a Technical After-Sales Centre, which will supply all information for correct use.

WARRANTY INTERVENTIONS

The request for information must be sent to the dealer.
The warranty intervention envisions the repair of the appliance without any charge, as provided by the law in force.

LIABILITY

EXTRAFLAME S.p.A. does not grant any compensation for direct or indirect damage caused or depending on the product.

LAW COURT

The Vicenza Law Court is elected as the competent court for any disputes.

Extraflame®

Riscaldamento a Pellet

EXTRAFLAME S.p.A.
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Fax 0445/865912
http://www.lanordica-extraflame.com
E-mail: info@extraflame.com

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Questo manuale, pertanto, non può essere considerato come un contratto nei confronti di terzi.

Extraflame reserves the right to change the features and data stated in the following file at any time without forewarning, in order to improve its products.
This manual cannot be considered as a contract for third parties.

Extraflame, dans le but d'améliorer ses produits, se réserve le droit de modifier les caractéristiques et les données reprises dans ce manuel à tout moment et sans préavis.
Par conséquent, ce manuel ne peut pas être considéré comme un contrat vis-à-vis de tiers.

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Por lo tanto este manual no se puede considerar como un contrato respecto a terceros.

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